
'Intelligible Beauty'

Recent Research on
Byzantine Jewellery

Edited by Chris Entwistle and Noël Adams

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Front Cover: Bracelet in the British Museum, with a bust of the Virgin on the disc of the clasp, dated to around AD 600 (PE AF 351). See Yeroulanou, p. 48.

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Foreword

The papers in this volume derive from a conference held at the British Museum and King's College, London, from 27–29 May 2008. The conference, organised under the auspices of the British Museum Byzantine Seminar, was the fifth in an annual series going back to 2003. The purpose of these conferences is to examine recent research in the field of Late Antique and Byzantine art and archaeology with a special focus on material culture. The objective of this particular conference was to concentrate on the burgeoning field of Byzantine jewellery with specific reference to the work being done by colleagues on the Continent. Papers delivered at the seminar covered a diverse range of topics ranging from technical deliberations to topics such as the relationship between the metalwork of Byzantium and its neighbours, including inter alia the Visigoths, Lombards, Avars, Slavs, Islam and Kievan Rus'. Further papers explored the topic of how we attempt (or not) to identify the jewellery emanating from the capital Constantinople as opposed to regional centres, and what are

the stylistic and technical criteria employed. All but four of the papers given at the conference are published in this volume.

For their assistance with photographic enquiries and other logistical matters the editors would like to thank respectively Marta Zlotnik and Stephen Zwirn of the Dumbarton Oaks Collection, Washington DC, and Christina Vona and Panorea Benatou of the Benaki Museum, Athens. Both Sofia Valente and Kit Candler, voluntary interns with British Museum Press, provided generously of their time towards the design of the volume. Further thanks are due to Cindy Archer, Grants Manager at the Thaw Charitable Trust. Our greatest debt, however, is to Josephine Turquet, Series Editor of British Museum Occasional Papers, without whose enthusiasm and patience this volume would be much the worse.

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A. Bosselmann-Ruickbie: A 13th-Century Jewellery Hoard from Thessalonica

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N. Christie: Byzantines and Lombards in Italy: Jewellery, Dress and Cultural Interactions

Pls 1,3,4 – Ravenna, Museo Archeologico Nazionale; Pl. 2 – Wikipedia; Pls 5,6,8 – London, British Museum; Pl. 7 – Cividale, Museo Archeologico Nazionale.

F. Daim: Byzantine Belt Ornaments of the 7th and 8th Centuries in Avar Contexts

Pls 1:1,1:2,1:4,1:5,2,3 (reconstruction of the mounted belt ornaments [single drawings]) – after E. Garam, *Funde byzantinischer Herkunft*, Budapest, 2001, Taf. 95; Taf. 94; Taf. 81; Taf. 53 and 54; Pl.1:3 after F. Daim, *Das awarische Gräberfeld von Leobersdorf, Nieder-österreich*, Vienna, 1987, Taf. 153; Pl. 4 (reconstruction) – after T. Vida, *Budakálasz – Dunapart*, Tivadar, 1996, 344–5; Pl. 5 – after B. Tobias, *Frühmittelalterliche Gräber mit Schmiedewerkzeugen* (RGZM Monograph) in preparation; Pls 6,14 – after E. Garam, *Katalog der awarenzeitlichen Goldgegenstände und der Fundstücke aus den Fürstengräbern im Ungarischen National-Museum*, Budapest, 1993, Taf. 72-4, Taf. 26; Pls 7,8,10,11 – after F. Daim, 'Byzantinische' Gürtel-garnituren des 8. Jahrhunderts', in *idem*, *Die Awaren am Rand der byzantinischen Welt. Studien zu Diplomatie, Handel und Technologietransfer im Frühmittelalter*, Innsbruck, 2000, Abb. 61–73; Abb. 75; Abb. 30b and 36b; Pl. 9 – after A. Rettner, 'Zu einem vierteiligen Gürtel des 8. Jahrhunderts in Santa Maria Antiqua (Rom)', in F. Daim (ed.), *Kontakte zwischen Iran, Byzanz und der Steppe im 6.-7. Jahrhundert*, Budapest, 2000, Abb. 6 and 7; Pl. 12 – photo: R. Müller (RGZM); Pl. 13 – drawing: V. Kassülke (RGZM).

J. Drauschke: Byzantine Jewellery? Amethyst Beads in East and West During the Early Byzantine Period

Pl. 1 – Washington DC, Dumbarton Oaks Collection; Pl. 2 – Nicosia, Cyprus Museum (after A. Yeroulanou, *Diatrita*, Athens, Benaki Museum, 1999, fig. 60); Pl. 3 – after E. Possenti, *Gli orecchini a cestello Alto-medievali in Italia* (Ricerche Archeologia Altomedievale e Medievale, 21), Firenze, 1994, 72, no. 40, pl. 13, 1-2; Pl. 4 – Oxford, Ashmolean Museum; Pl. 5 – Regierungspräsidium Freiburg, Referat 25 Denkmalpflege (Y. Mühleis); Pl. 6 – Bayerisches Landesamt für Denkmalpflege (Johann Rauch); Pls 7,8,10,11 – author; Pl. 9 – after A. Burzler et al., *Das frühmittelalterliche Schleithelm – Siedlung, Gräberfelder und Kirche*, Schaffhausen, 2002, 331, pl. 110,30.5.

C. Eger: Byzantine Dress Accessories in North Africa: Koiné and Regionality

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C. Entwistle: Notes on Selected Recent Acquisitions of Byzantine Jewellery at the British Museum

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Pl. 1a – London, British Museum; Pls 1b,2,3,6,7,8 – Kiev, Museum of Historical Treasures of Ukraine, photos by Volodymyr Kashtanov, except Pl. 7 by Dmytro Klochko; Pls 4,5,9 – The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917. (17.190.702 and 704); 1990.235 a,b. Images © The Metropolitan Museum of Art, New York; Pl. 10 – Lviv, Historical Museum (drawing after the original).

N. Ristovska: 'Temple Pendants' in Medieval Rus': How Were They Worn?

Pls 1,4,6 – after W. Seipel (ed.), *Gold aus Kiev: 170 Meisterwerke aus der Schatzkammer der Ukraine*, Vienna, 1993, cat. nos 114 and 118, and fig. 13 on 52; Pls 2,10 – after V.M. Vasilenko, *Russkoe prikladnoe iskusstvo: istoki i stanovlenie*, Moscow, 1977, figs 104 and 125; Pl. 3 – after B. Kolčín et al., *Древний Новгород: прикладное искусство и археология*, Moscow, 1985, fig. 56a; Pl. 5 – after T.I. Makarova et al., 'Ukrašeniya iz dragotsennykh metallov, splavov, stekla', in B.A. Kolčín and T.I. Makarova (eds), *Drevnjaja Rus': byt i kul'tura*, Moscow, 1997, pl. 51 (1-27), and E.A. Rjabinin, *Kostromskoe Povolž' v epohu srednevekov'ja*, Leningrad, 1986, pl. I (1, 2-3, 18); Pl. 7 – after V.K. Gončarov, *Rajkovetskoe gorodište*, Kiev, 1950, pl. XX/15; Pl. 8a – after V.P. Darkevič and A.L. Mongajt, *Klad iz Staroj Rjazani*, Moscow, 1978, pl. II/2; Pls 8b,9 – after V.P. Darkevič and V.P. Frolov, 'Starorjazanskij klad 1974 g.', in T.V. Nikolaeva (ed.), *Drevnjaja Rus' i Slavjane*, Moscow, 1978, fig. 3, fig. 8 on 351; Pl. 11 – after I.S. Vinokur et al., 'Re ovij skarb iz litopisnogo Gubina', *Arheologija* 2003/1, figs 4, 9, 11 and 16; Pls 12a-s,14d – after M.A. Saburova, 'Ženskij golovnoj ubor u Slavjan (po mater Vologodskoj ekspeditsii)', *Sovetskaja arheologija* (1974/2), figs 1–3; Pl. 12t – author; Pls 13a-b,14a-c – after M.A. Saburova, 'Drevnerusskij kostjum', in Kolčín and Makarova (*ibid.*), pls 77/1-2 and 76/1-3; Pl. 13c – after I.P. Rusanova, *Kurganypoljan X-XII vv*, Moscow, 1966, pl. 22/2; Pl. 14e – after M.A. Saburova, 'Oženskih golovnyh uborah s žestkoj osnovoj v pamjatnikah domongol'skoj Rusi', *Kratkie soobščeniya Instituta arheologii* 144 (1975), fig. 2; Pl. 14f-h – after M.A. Saburova and M.V. Sedova, 'Nekropol' Suzdalja', in I.P. Rusanova (ed.), *Kul'tura i iskusstvo srednevekovogo goroda*, Moscow, 1984, fig. 14/4a-b.

J. Spier: *Some Unconventional Early Byzantine Rings*

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Y. Stolz: *The Evidence for Jewellery Production in Constantinople in the Early Byzantine Period*

Pl. 1 – Photo: C. Gerigk; © Franck Goddio/Hilti Foundation (after F. Goddio and M. Clauss (eds), *Ägyptens versunkene Schätze*, Munich/New York, 2007, 243, fig. 59); Pl. 2 – after G. Bovini, *Ravenna und seine Mosaiken*, 1962, fig. 41; Pl. 3 – after I. Baldini Lippolis, *Loreficeria nell'impero di Costantinopoli tra IV e VII secolo*, Bari, 1999, fig. 7a; Pl. 4 – Photo: Y. Stolz; © Franck Goddio/Hilti Foundation.

B. Szmoniewski: *Byzantium and the Slavs in the Light of Goldsmiths' Production*

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B.Toth: *The Six Techniques of Pierced Jewellery in Late Antiquity and Their Evolution*

Pls 1–22 © Author. The author would like to thank the British Museum (Figs 1,8,12b–d,14–17,19,20,22), the Musée du Louvre (Figs 9,11,13,21), the Bibliothèque Nationale de France (Figs 10a,12a,18), and the Römisch-Germanisches Zentralmuseum, Mainz, (Fig. 10b) for permission to publish. Pl. 23 is after A. Yeroulanou, *Diatritia*, Athens, 1999, no. 23, fig. 44.

A. Yeroulanou: *Important Bracelets in Early Christian and Byzantine Art*

Pls 1,5,12,21,27 – Washington DC, Dumbarton Oaks Collection; Pl. 2 – Athens, Cycladic Museum; Pls 3,18,22,24 – The Metropolitan Museum of Art, Gift of J. Pierpont Morgan (17.190.2053; 17.190.148; 17.190.149; 17.190.1668–69; 17.190.1670), Images © The Metropolitan Museum of Art; Pl. 4 – Athens, National Archaeological Museum, Stathatos Collection; Pls 6,16 – Virginia Museum of Fine Arts, Richmond. The Adolph D. and Wilkins C. Williams Fund. Photos: Ron Jennings © Virginia Museum of Fine Arts; Pl. 7 – Athens, Byzantine Museum; Pls 8,9,10,19 – London, British Museum; Pls 11, 17 – Los Angeles, The J. Paul Getty Museum; Pl. 13 – Algiers, Musée National des Antiquités; Pl. 14 – Berlin, Staatliche Museen, Antikensammlung; Pl. 15 – Cologne, Römisch-Germanisches Museum; Pls 20,28,29 – Athens, Benaki Museum; Pl. 23 – Varna, Archaeological Museum; Pl. 25 – Thessalonika, Museum of Byzantine Culture; Pl. 26 – Athens, P. and A. Kanellopoulos Collection.

The Six Techniques of Pierced Openwork Jewellery in Late Antiquity and their Evolution¹

Bálint László Tóth

Introduction

The development of pierced openwork jewellery is a characteristic phenomenon of Late Antiquity.² The distinctive feature of this type of object compared to other forms of art is the high value of the raw material – mostly gold. Consequently, the way in which this costly material was used became a central preoccupation of the goldsmith. During Late Antiquity at least six different techniques were invented to improve the way in which the gold could be economised, to simplify the manufacturing process or for aesthetic purposes. The question of the importance of each of these factors has to be dealt with here briefly before discussing the techniques. Whether techniques or aesthetics are the primary factor in the evolution of art is a debate which goes back to the end of the 19th century and is of specific concern with regards to the works of art of Late Antiquity.³ By studying jewellery strictly from a technical point of view, this paper does not intend to take issue with a materialistic vision of the evolution of Late Antique art. The aesthetic changes that one can see on pierced jewellery are a transposition on a smaller scale of the changes which occur in the monumental arts of the 3rd century. These general aesthetic changes had a great impact on the “techniques” employed on pierced jewellery, because the liberty taken with naturalistic shapes freed the figures and the vegetal ornaments used on jewellery from the formal conventions of the classical tradition, which were technically too constraining. When there was no aesthetic objection to flattening shapes or to deforming their proportions, new techniques could freely develop, naturally going in the direction of an economy of material and of time necessary for the manufacture of objects. But these technical changes would hardly have been possible without the aesthetic changes which occurred in the major arts in the 3rd century such as sculpture, painting, etc., which were the formal models used for the figures and the ornamentation on jewellery.

Two important works of the 1990s initiated research on the techniques of pierced jewellery.⁴ Ogden and Schmidt’s paper in 1990 dealt with the techniques used for piercing jewellery as well as of the method of creating hollow beaded wire.⁵ They distinguish two techniques: the first one is called ‘chisel-cut’ pierced work and consists of simply cutting out the pierced pattern with a sharp chisel in a thin sheet of gold; the second technique is based on round perforations punched into the metal, which were afterwards ‘opened out’ with a triangular-sectioned chisel.⁶ This technique uses a thicker sheet of gold and creates smaller patterns. It was successfully reproduced in experiments carried out by Ogden and Schmidt. According to them the round perforations are obtained by pressing a tapered round-section punch through the sheet. I rather think that the perforations were achieved with a small round-section punch with a convex end, according to the marks made by this tool in

those places where it did not entirely perforate the sheet (see p. 7). The triangular-sectioned chisel (comparable to a graver) used by Ogden and Schmidt during their experiments to carve the metal is useful in creating the angles, but most of the time the tool marks bear witness to an ordinary chisel. The example they select for the ‘chisel-cut’ technique – the fragmentary jewel from the Fayoum, now in the British Museum⁷ – has patterns which were not just simply cut out. It corresponds to what I call the chasing-cutting technique which means that the patterns were first chased in order to give them relief before being cut out.

This technique has been explained by Niemeyer in a study which focused on the great necklace from the Assiût treasure.⁸ Niemeyer also distinguishes the two techniques described by Ogden and Schmidt, emphasising more the chasing-cutting technique which is used on the necklace. She explains that the cutting out of the patterns is brought out on a soft support by chasing all around the patterns, that is, by pressing the chisel in a repeated way against the sheet which creates strong deformations on the obverse. The cut-out piece is then pressed from the obverse in order to be removed from the sheet. She suggests that the repeated chasing of the patterns was enough to cut them practically out and to remove them easily by pressing from behind. I rather think that the work of chasing and cutting are two separate phases of the technique, the first one usually using a blunt chisel, the second a sharp chisel which is pushed in an oblique way against the inner wall of the patterns (see the drawing in Pl. 4).

These studies agreed about the existence of two different techniques, but the reasons for their development were not clear. In fact, these techniques appear only at an advanced stage of the evolution of pierced jewellery, towards the end of the 3rd or the beginning of the 4th century. Several other techniques existed before their appearance and some other techniques appeared after them. They take part in a long evolution which is different in the West and the East.⁹ I will argue here that the evolution of the different techniques can be explained by the constant search to reduce the cost of pierced jewellery and to simplify the work of the goldsmith.

In order to study the different techniques of pierced jewellery it is necessary to have a precise terminology. As far as possible I have tried to find simple words which sum up the principle of each of the techniques in order, as for example the cutting-carving technique, in which the holes are first cut out and then carved out, or the chasing-cutting technique in which the patterns are chased before cutting them out.

There are three elements in an openwork object: the surface, the depth and the opening (Pl. 1). The surface is that part of the openwork which is in the foreground. It is usually flat and creates the patterns depicted by the openwork. The depth of the gold sheet is the part which produces an effect of

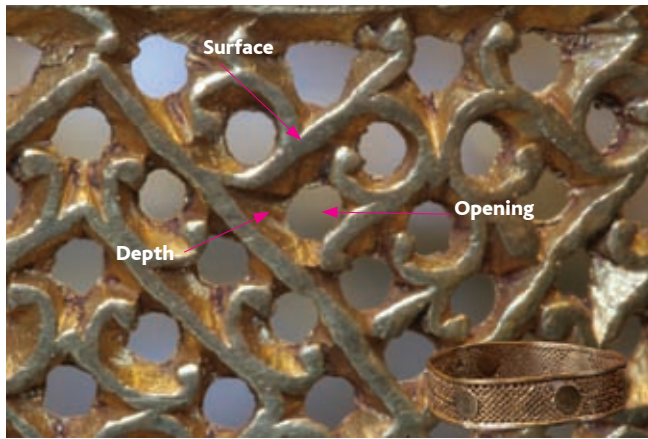


Plate 1 The three parts of an openwork object: surface, depth and opening

relief when we look at the jewel. It has a multiplicity of planes and reflects the light from a variety of angles. The opening is the real cavity which is in the background of the openwork. Looking at the front of a jewel of this type, there are different levels of reading because the surface, the depth and the opening reflect light differently. The surface has a relatively united colour because it is flat; the depth has a variety of shades because it reflects light coming from different directions; the opening gives a background colour. These three elements of openwork – the surface, the depth and the opening – are ideal for creating luminous effects and bringing out the special relationship between light and gold.

Six different techniques are taken into account in this work: cutting-carving, cutting, chasing-cutting, perforating-carving, perforating-chasing, and perforating-punching. Each one stands out from the other because they are composed of different phases, use different supports and do not give the same result. There are mainly two kinds of tools which are used for the six piercing techniques: first the chisel, which can be of different sizes and is also useful for decorating the surface of the openwork. Because of the small scale of the patterns, the chisel must also have the smallest size possible. It can take different forms: the chisel with a blunt blade, which is used to push in the sheet of gold without cutting it (which is called chasing); and the sharp chisel with which the carving and the cutting is carried out. The latter can also have a triangular section, as has been shown by the study of Ogden and Schmidt, and was mostly used for carving out angles. Moreover, different kinds of punches are employed which are useful for perforating the sheet or decorating the surface of the openwork.

The manufacturing process of the six techniques

In order to distinguish the techniques, their manufacturing process is illustrated by six drawings (Pls 2–7). These show a section of the sheet, the thickness of which differs according to the technique. The drawings explain the way in which the sheet is pierced, the resulting deformations, and the processing afterwards, which involves carving or chasing the sides and the angles of the openwork and flattening the burrs. These drawings will help us to understand the tool marks and the deformations which are visible on the jewels, and which we will study afterwards.

The cutting-carving technique and the cutting technique

seem to be the earliest ones. The cutting-carving technique consists in cutting out patterns which are smaller than the final result, by going around it with a sharp chisel, and then carving it until obtaining the required result (Pl. 2). First the sheet is placed on a hard support to avoid its deformation from the pressure of the chisel while cutting out the opening (Pl. 2.1). However, it should not be so hard a support as to blunt the chisel, so wood was probably used. As the chisel pierces the sheet, it drives into the wood used as support and drags along pieces of the sheet into the small gap opened by the chisel in the wood, creating burrs. The sheet does not bend thanks to the hardness of the wood placed behind it, but small pieces of the sheet have set into the gaps created by the chisel in the wood. Second, the cut-out pieces are removed (Pl. 2.2). Third, the sides and the angles of the openwork are carved out with a small sharp chisel which removes gold shavings (Pl. 2.3). Fourth, the sheet is placed upside-down in order to flatten the burrs created on the back by the process of cutting (Pl. 2.4). This is a technique which needs a relatively thick sheet of gold to have enough material to carve.

The cutting technique simplifies the process (Pl. 3). By giving up the carving phase, it allows the jewellery to be of a thinner sheet, which creates a less expensive jewel. Indeed, the thickness of the sheet of gold is only useful if it is intended to be carved; if the patterns are only cut out, this thickness can be reduced at will. The other phases of the work are the same as for the previous technique: the openings are cut out by a sharp chisel (Pl. 3.1), the cut out pieces are removed (Pl. 3.2), and the burrs which have been driven into the wood with the chisel during the cutting are flattened (Pl. 3.3).

The advantage of the cutting technique is that it uses a thin sheet of gold. The disadvantage is that it is practically impossible to give relief to the patterns by this technique: it requires a completely flat decoration. The chasing-cutting technique is a solution to this problem (Pl. 4). This is the most ingenious technique because it makes it possible to create considerable relief with a very thin sheet of gold. To create the relief, all the patterns are first chased, which means that with a blunt chisel the outline of the designs are pushed into a soft support, placed behind the sheet of gold, so that the sheet is deformed (Pl. 4.1). Second, a sharp chisel is chosen to cut out the openwork. As can be seen on Pl. 4.2, the sharp chisel is pushed into the sheet in an oblique way, by pressing it against the inner wall of the patterns which have been chased, in order to follow in the nearest way the relief. In fact, if the chisel cut the openwork in the middle of the depression created by the chasing, the result would not be satisfactory because a fold could be seen in the bottom of the openwork, instead of a uniform relief. This happens sometimes on jewels which have been executed hastily. Third, the cut out pieces can be removed if the cutting was not deep enough (Pl. 4.3). The result is a strong relief, which can be compared to that of the cutting-carving technique, but the technique is very different, the work is much faster and the thickness of the sheet is insignificant.

The perforating-carving technique comes from the cutting-carving technique (Pl. 5). On some jewels made by the cutting-carving technique, there are already some elements – mainly the more or less circular patterns – for which the perforating-carving technique has been used, showing the transition from one technique to the other. In the perforating-carving

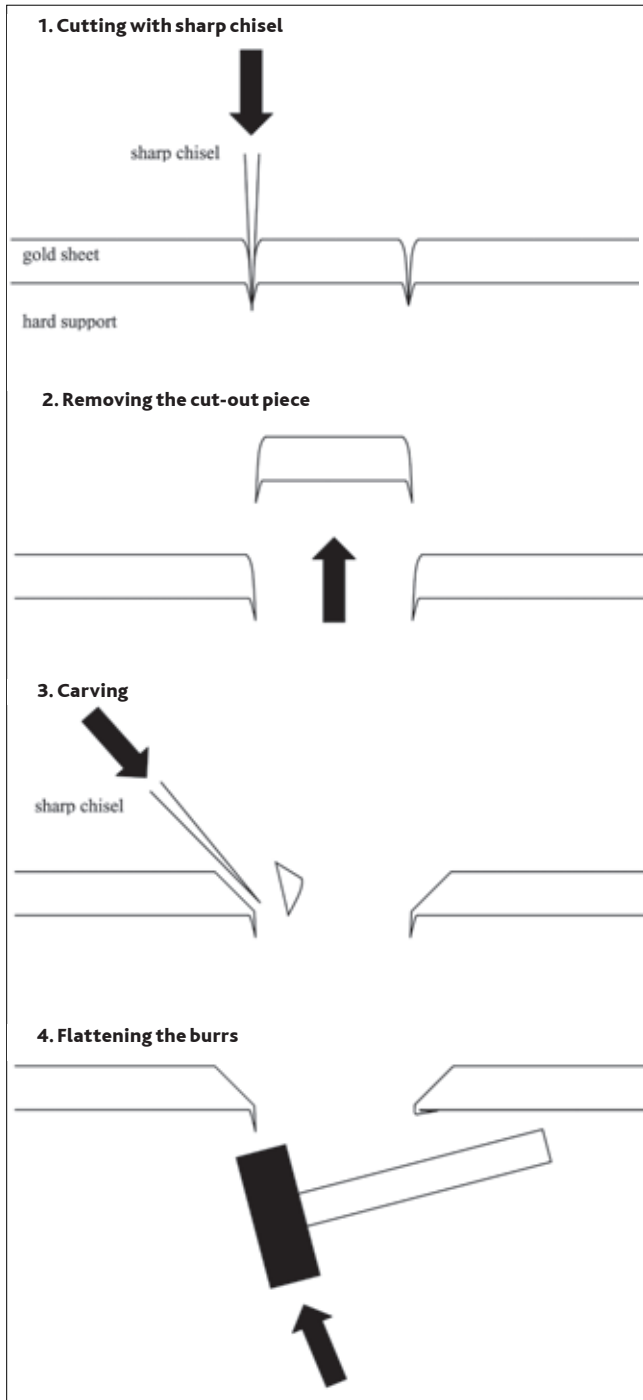


Plate 2 The cutting-carving technique

technique, instead of cutting all around the patterns, a small round punch is used with which the openwork can be perforated in a single action (Pl. 5.1). It accelerates the work, because the pattern no longer needs to be cut all around. As the end of the pointed or rounded punch is convex, it does not remove any metal. As it goes through the sheet, the latter opens around the spherical end of the punch and bends on the sides. The sheet has to be placed on a hard support to avoid its deformation during the perforation process. Then the sheet is carved to give a final form to the openwork by creating a relief at the angles and on the sides of the opening (Pls 5.2, 5.3). Finally the burrs which set into the wood, dragged along with the action of the punch, are flattened (Pl. 5.4). The carving phase needs a certain thickness of sheet to have enough material to carve.

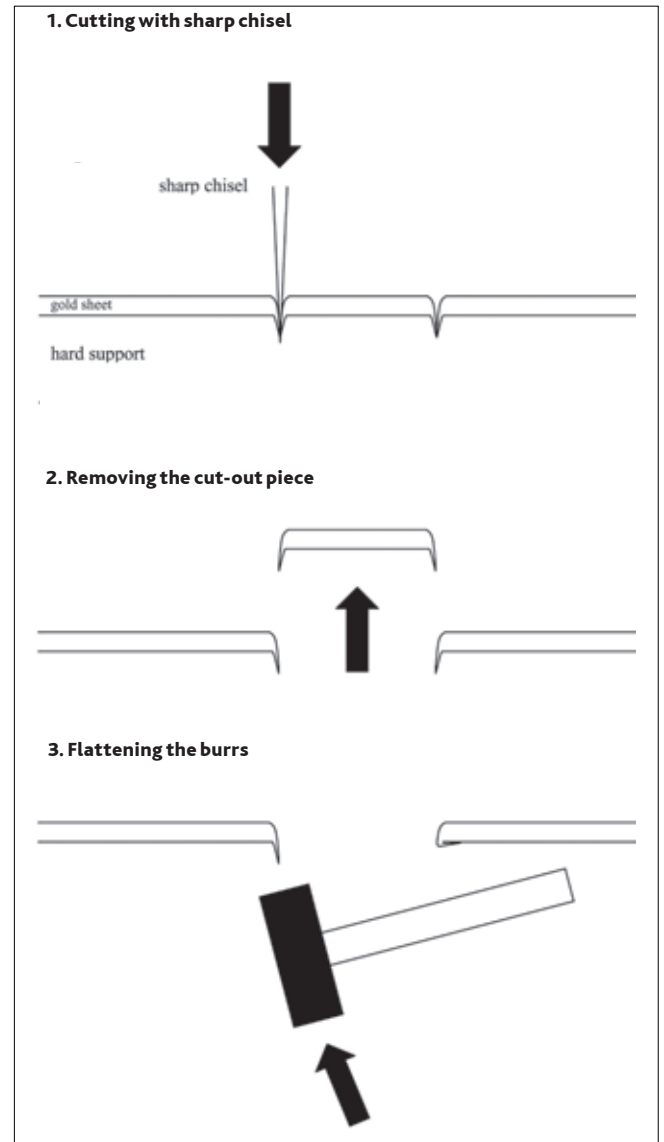


Plate 3 The cutting technique

The perforating-chasing technique accelerates the work compared to the perforating-carving technique and uses a thinner sheet of gold (Pl. 6). Indeed, the sheet's thickness is diminished by replacing the carving phase by the chasing phase. The small round punch pierces the metal, as in the previous technique (Pl. 6.1). To get the patterns, the surface of the sheet is chased near the perforations by pushing a chisel into the sheet, which is not too sharp, to avoid going through it (Pl. 6.2). In the end the burrs are planed, instead of being flattened, because in this way the chasing on the front is not damaged (Pl. 6.3). The work is simplified and above all the thickness of the sheet of gold is reduced.

The perforating-punching technique is the continuation of the previous one, but in a much simplified form (Pl. 7.1). First the patterns are perforated with a punch as in the last two techniques (Pl. 7.1). But instead of chasing each side of the patterns, a punch will be pushed into the sheet of gold, which has already the form of the pattern wanted (Pl. 7.2). This considerably accelerates the work because a single movement is sufficient to give a pattern.¹⁰

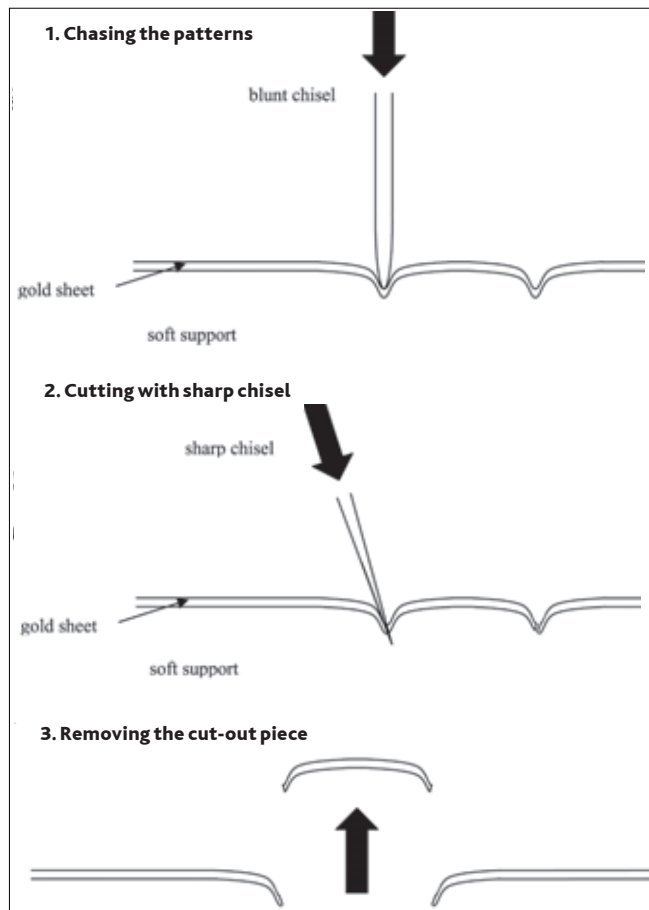


Plate 4 The chasing-cutting technique

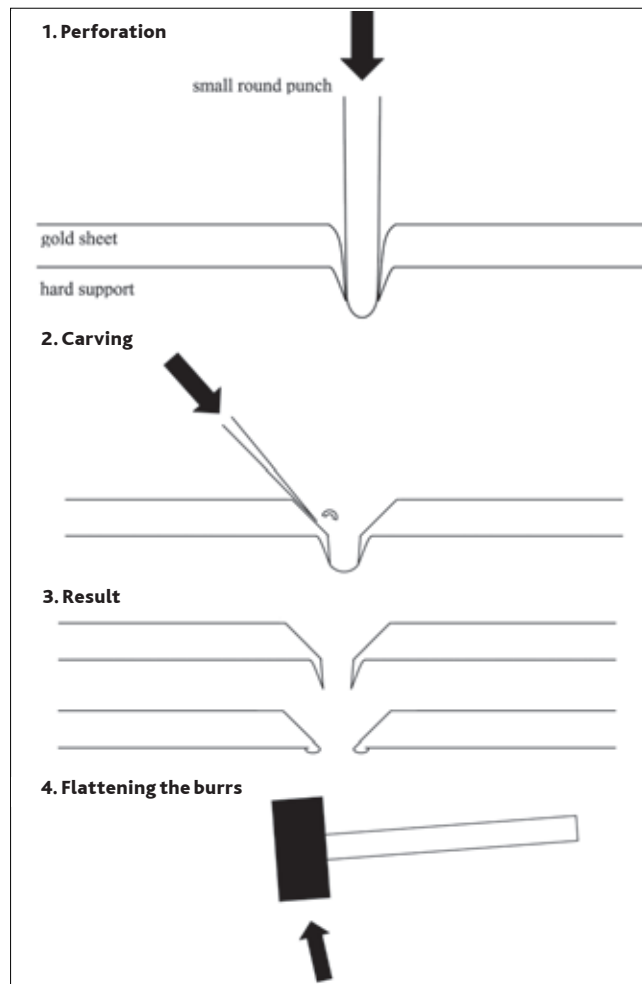


Plate 5 The perforating-carving technique

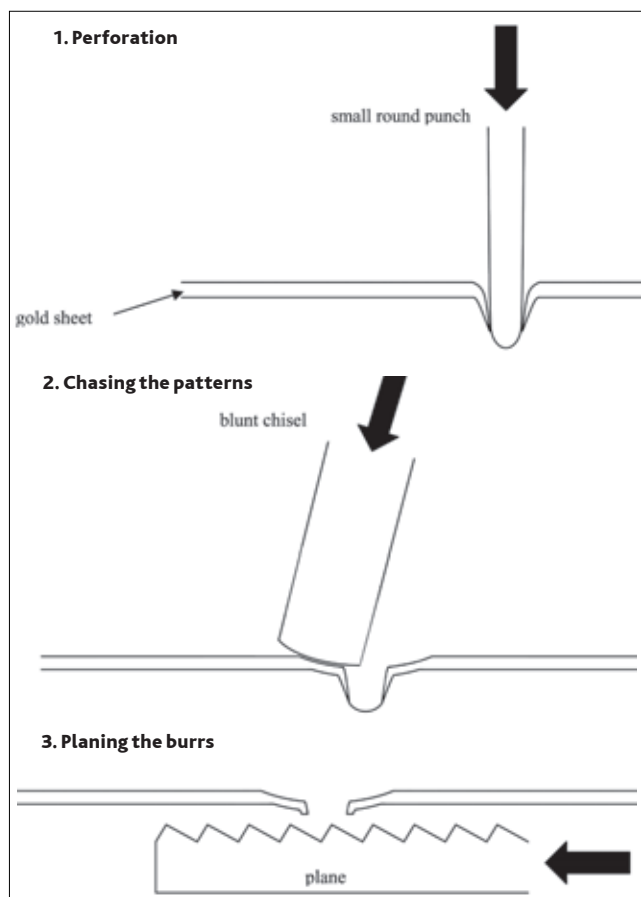


Plate 6 The perforating-chasing technique

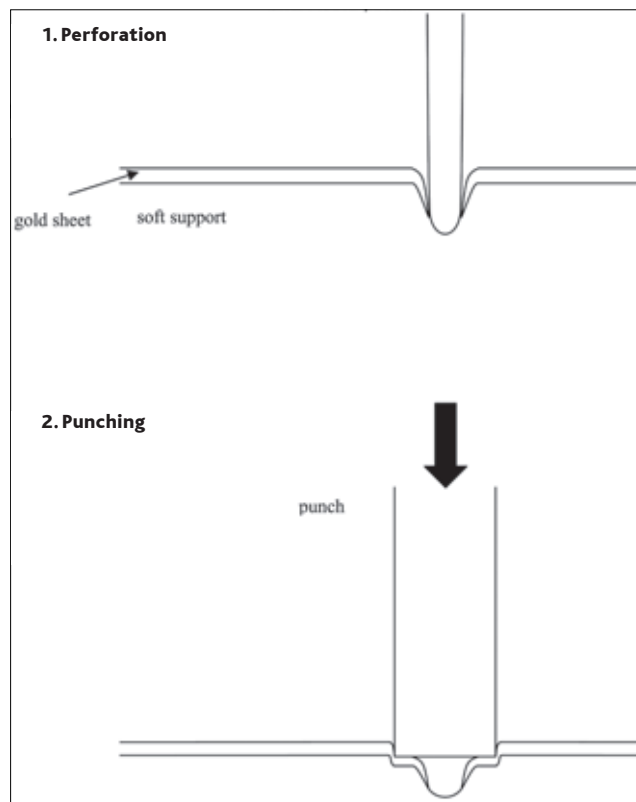


Plate 7 The perforating-punching technique

The tool marks and the deformations created by the techniques

To decide whether a jewel belongs to one technique or another, the best method is to examine the tool marks on the front and the deformations on the back. I present here some close-up photos showing several examples of tool marks and deformations (Pls 8–23). Based on these observations, one can establish a method for recognising each technique.

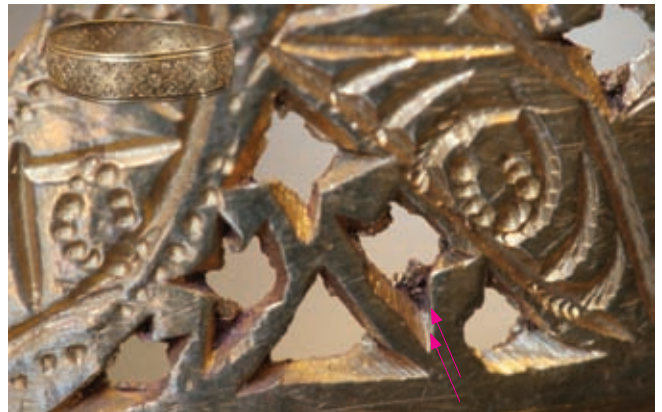
Several techniques include a phase of ‘carving’. This consists of removing small pieces of material with a sharp chisel. This process can be recognised by observing the front of the jewels, where a great number of shavings coming from the carving are still stuck to the sheet, as can be seen on **Pl. 8** showing two bracelets from the Hoxne treasure. The relief can be made by carving the sides of the openwork, so that the depth will have an oblique plane compared to the surface. This is what one can see on **Pl. 8a** where shavings created by carving the sides of the openwork are clearly visible. The carving phase is especially useful for the angles of the patterns, which are often only carved into the depth of the openwork and do not contribute to the real opening as one can see on **Pl. 8b** where an aggregate of shavings coming from the carving remains stuck to an angle of the openwork.

The cutting or the perforation creates deformations on the back of the gold sheet. The type of deformation on the back of an object depends not only on the sharpness of the chisel but also on the kind of support placed under the sheet during the cutting or the perforation. The deformations can be classified into two categories: the burrs, which result from those techniques using a hard support during the cutting or the perforation, and the folds which occur when a soft support is used.

The cutting-carving technique

The cutting-carving technique is among the techniques which uses a sharp chisel during the cutting and a hard support, with the result that the deformations on the back are burrs. Three examples illustrate these burrs (Pls 9 and 10) which occur on the back of jewels using the cutting-carving technique. The burrs result from the special properties of gold as a material which exhibits significant plasticity when pure enough. As the chisel or the perforator runs through it, it can easily drag a part of the sheet by a shearing effect, which will set into the wood along the depressions created by the sharp tool. The gold sheet is not deformed elsewhere because the wood supports it. This explains the abrupt transition between the burrs and the sheet because the latter was supported by the wood during the cutting, whereas the burrs could get inside the wood in the places where the sharp tool has cut into it.

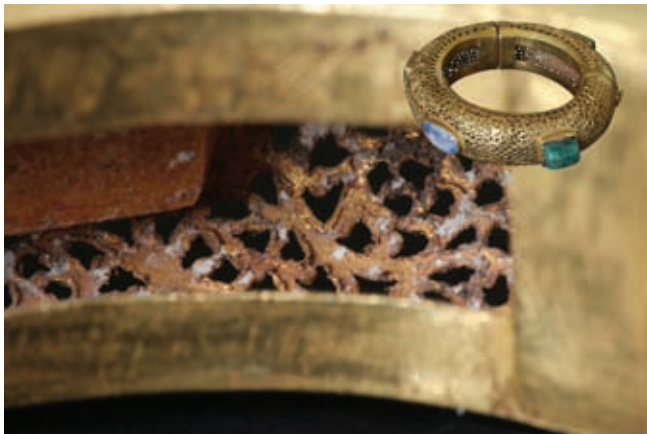
The burrs created by the cutting-carving technique follow the irregular shape of the openings, as one can see on **Pl. 9**. Usually these burrs are flattened as can be seen on **Pls 9** and **10a**. Indeed, placed on the back of bracelets, rings and pendants, they are regularly in contact with the cloth or the skin of the wearer. These burrs need to be reduced as possible by flattening. The tool used for this ‘flattening’ is unknown. Maybe, as Dandridge has proposed, it was a burnisher.¹¹ This is a blunt tool which would be pushed against the burrs in order to flatten them. In rare examples the burrs were left undamaged because they were not in contact either with the



Plates 8a and 8b Shavings stuck to the depth of the openwork resulting from the carving on bracelets made by the perforating-carving technique



Plates 9a and 9b Detail of the burrs on the back of the beetle pendant from the Louvre; front of the pendant



Plates 10a and 10b Flattened burrs on a bracelet in the Bibliothèque Nationale, Paris; undamaged burrs on a bracelet in the RGZM, Mainz

skin or the cloth of the wearer. This is what one can see on a bracelet in the Römisch-Germanisches Zentralmuseum, Mainz (**Pl. 10b**). This bracelet has curved sides with which the wearer's skin was not in contact. It is a good illustration of the shape of the burrs before they are flattened. As on the flattened ones, the burrs have an irregular shape, following the course of the chisel which was used to cut out the patterns. This is the main difference between the cutting-carving technique and the perforating-carving technique, where these burrs have a round shape.

The cutting technique

The cutting technique creates the same kind of burrs as the cutting-carving technique, as one can see on **Pl. 11**. These techniques create the same burrs on the back, because both use a hard support like wood during the cutting and a sharp chisel. The only difference between the two is that in the cutting technique the carving phase is lacking, so one can see the same patterns on the back as on the front, whereas for the jewels of the cutting-carving technique the patterns are hardly recognisable on the back because it is the carving phase which gives the final shape to the patterns. This is why on the necklace¹² illustrated in **Pl. 11**, the patterns can be clearly seen on the back, because in the cutting technique the cutting phase gives the final form to the patterns without the carving being necessary to complete it.

The chasing-cutting technique

The examples seen previously illustrate techniques which use only sharp chisels and a wooden support. The back of these jewels show burrs of the metal which have set into the wood



Plate 11 Burrs on the back of a jewel made by the cutting technique

just when the sharp tool was cutting into it. These burrs are usually flattened later on.

Plate 12 shows some examples where a blunt chisel was also used and the support was a soft one for most of the time. These reflect the chasing-cutting technique which has very different deformations on the back to the burrs seen previously. The deformations are folds of the metal, mostly resulting from the chasing phase, when all the patterns were pressed into the soft support with a blunt chisel, but also from the cutting, because while the sharp chisel is cutting the patterns chased before, it continues to press the sheet into the soft support. Unlike the burrs of the former techniques, the folds are desired and controlled deformations. The chasing-cutting technique uses a soft support such as wax or clay. As seen on **Pl. 4.1**, the sheet can bend thanks to this soft support while the patterns are being chased and cut. The outcome is a progressive fold of the sheet all around the patterns (**Pls 12a-d**). Its shape is very different from the burrs which result from the perforation of gold by a sharp tool on wood. Here the support was less hard and there was no strain between the wooden support and the force of the sharp tool which would lead to the setting of a piece of metal into the wood where the tool has cut it. As there is no strain between the sheet and the soft support, there are no burrs of the metal either.

Various effects can be obtained by this technique according to the thickness of the gold sheet and the size of the patterns cut out, as one can see on **Pls 12a-d**, because the fold of the metal is in inverse proportion to the thickness of the sheet. Consequently, there are two main styles for this technique: the broken-relief style where the folds are less important and the high-relief style where the folds have more impact. In the



Plates 12 a, b Back (left) and front (right) of jewels of the broken relief style of the chasing-cutting technique; **c, d** Back and front of jewels of the high-relief style of the chasing-cutting technique

broken-relief style, the patterns are relatively small compared to the thickness of the gold sheet and the fold gives only a 'false thickness' to the sheet (**Pls 12a and 12b**). It can be called the broken relief style because there is a break between the surface and the depth of the openwork. In the high-relief style, the patterns are relatively large compared to the thickness of the sheet and the fold becomes important, creating a relief which curves progressively (**Pls 12c and 12d**).

These two styles do not correspond to a distinction between the Roman and the Byzantine periods for jewels of this technique because both styles existed in both periods.¹³ The distinction between Roman and Byzantine jewels is based more on the type of chasing of the preparatory work which

acquires a different function on Byzantine jewels using chasing also to draw areas on the sheet which will not be cut out afterwards. On Byzantine jewels the chasing phase creates continuous lines between the pierced and the plain parts. This is what can be seen on the de Clercq earring in the Louvre, on which some of the chased areas indicated by the red arrow in **Pl. 13** have not been cut out afterwards. This shows clearly the chasing phase which preceded the cutting phase.

To get an even higher relief, *repoussé* work had to be used between the chasing and the cutting phases. It is a rare technique because usually the fold of the metal coming from the chasing action on the soft support is sufficient. Yet sometimes the goldsmith was led to use *repoussé* to emphasise



Plate 13 Chased areas (back, front) which have not been cut afterwards on an earring from the de Clercq collection in the Louvre

the relief inside the plain parts on a detail or the whole of the openwork. The pair of earrings from the de Clercq collection also illustrates this process (Pl. 13). The *repoussé* was used to give more relief to the three feathers decorating the wings of the peacocks. It is obvious that during the chasing phase these feathers were drawn around by a blunt chisel. The marks of the repeated impressions caused by the action of the chisel can be clearly seen on both the front and back of the object. In this way, the break where the sheet has to bend when the patterns will be pushed was delimited precisely. Next the sheet was pushed from behind into a soft support with a blunt tool to give the feathers a high relief.

The chasing-cutting technique is the one which had the longest life, from the end of the 3rd to the 8th century and

which created a variety of forms during its long existence. Its success can be explained by its relatively low cost compared to other techniques because it requires only a thin sheet of gold and also has the ability to create a strong relief.

The perforating-carving technique

The tool used to perforate the round holes for the perforating-carving technique was a small round convex punch as illustrated in Pl. 5.1. One can obtain an idea about the shape of this tool from the marks left on the surfaces of the jewels. Indeed, there are some jewels on which the goldsmith has hesitated in placing the round perforations. Sometimes he started to perforate the sheet with his tool without breaking through because he understood meanwhile that there was not enough space for the perforation or that he was mistaken in choosing the place for the perforation. One of the objects which clearly shows hesitations of this sort is a pair of pierced spoons from the Hoxne treasure which have a chased and gilded representation of a sea god flanked by two fish or sea monsters (Pls 14–16). The places where the goldsmith started to perforate a round hole without finishing it are indicated by a red arrow on Pl. 14. Such mistakes show the goldsmith's hesitation: he was perhaps not very experienced. On the second spoon the goldsmith seems to have gained more experience because he made only one mistake. He was trying to place a perforation in an improper spot on the scroll at the bottom on the left before realising that by placing a perforation here the scroll would no longer be a spiral (see the red arrow at the right of Pl. 14). This shows that before perforating the sheet, the goldsmith made a preliminary sketch of the places to perforate by pushing gently with the round punch without



Plate 14 Hesitations in placing the perforations on the pair of pierced spoons from the Hoxne treasure

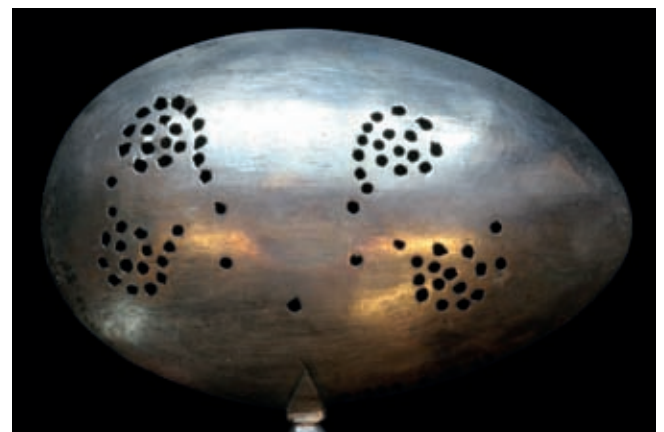


Plate 15 The round perforations visible on the back of the pierced spoons from the Hoxne treasure



Plate 16 Enlargement of the mistakes in placing the round perforations on the pair of pierced spoons from the Hoxne treasure

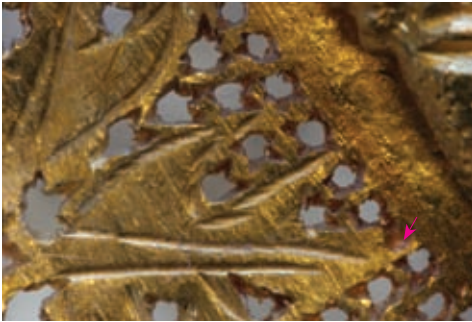


Plate 17 Enlargement of the mistakes in placing the round perforations on armband no. 26 and bracelet no. 29 from the Hoxne treasure



Plate 18 The back showing unaltered round perforations on the bracelet from the de Luynes collection in the Bibliothèque Nationale, Paris

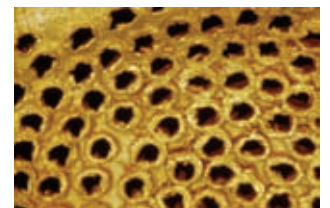
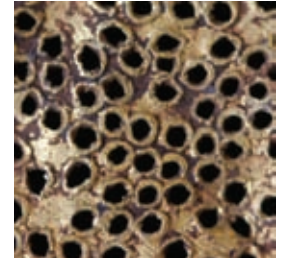
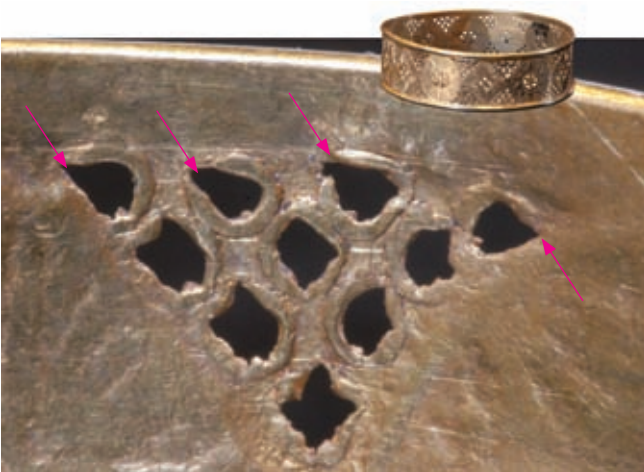


Plate 19 The round burrs distorted by carving before hammering on bracelet no. 18 from the Hoxne treasure

Plate 20 Flattened burrs on jewels of the perforating-carving technique

going through the sheet to have an idea about the final places for the perforations which he could readapt if he had made a mistake. The enlargements of these mistakes show the shape of the tool which was used to perforate the holes: it was obviously a small round punch with a convex end (Pl. 16).

These hesitations are not confined to the goldsmith who made the spoons from the Hoxne treasure. One finds the same kind of mistakes on bracelet no. 29 and on the armband no. 26, both from the Hoxne treasure (Pl. 17). On a bracelet in the Bibliothèque Nationale one can see the unaltered result of the perforation of holes with the small round convex punch: the sheet opened up in a way which follows the spherical shape of

the punch (Pl. 18). This bracelet has the special feature of having retained the undamaged shape of the round burrs on its back. They have not been flattened because they did not chafe the skin of the wearer with which they had no direct contact. Nevertheless, on most of the jewels made by this technique the burrs have been flattened as one can see on Pls 19–20.

The perforating-carving technique is sometimes easily recognisable thanks to the round burrs seen on the back of these jewels (Pls 18, 20). However, it is sometimes more difficult to recognise this technique. Indeed, if the carving is extensive it can alter or even eliminate the round burrs from the back of these jewels. There are several kinds of round burrs

according to the extent of the carving. If the carving is minimal, the round burrs on the back will be almost unaltered (Pl. 20). On other jewels the round shape of the burrs are slightly altered because the carving has removed part of it. As the carving comes before the flattening, the shape of the burrs is not perfectly round when it comes to flattening them which gives distorted round burrs after flattening. This is what one can see for example on bracelet no. 18 from the Hoxne treasure (Pl. 19). Before being flattened, the round burrs were altered on one side (see the red arrows on Pl. 19). When they were flattened, they could not take on a shape as round as on the jewels of Pl. 20.

The perforating-chasing technique

At a more advanced stage the carving is replaced by chasing to make even smaller patterns, which leads to the perforating-chasing technique. It is quite easy to identify this by looking at the back of the jewel as one can see, for example, on a bracelet in the Louvre, or on a ring in the British Museum (Pls 21–22). In this technique the round perforations are almost intact, because, unlike carving, chasing does not remove any material. If carving does not leave any mark on the back of the sheet, chasing is easily recognisable, because the chisel thrusts into the gold and creates an undulating back of the sheet. On both the Louvre's bracelet and the British Museum's ring one can see that these deformations radiate around the round perforations because they are the starting point for the chasing. To protect the chasing, which are intentional deformations of the sheet, the burrs are planed instead of being flattened. One can easily see the marks of the planing on the back of the bracelet in the form of streaks having the same direction on all of the round burrs planed down (Pl. 21 top).



Plate 21 Strong deformations on the back of the Louvre's bracelet

The perforating-punching technique

The perforating-punching technique is easy to recognise by simply looking at the front of the object. The patterns have exactly the same module because they take on the shape of the punch which was used to create them. On the Lambousa necklace one can see how the patterns have perfectly repetitive shapes of squares joining each other by their angles (Pl. 23). It is because the same punch was used to make them: a small triangular punch and another square-shaped one. If one looks more closely at the openwork one can see that each unit was first perforated before being punched. This is what distinguishes this technique from the simple punching technique in which the openwork character of the jewel disappears.

The table opposite summarises the different criteria needed to identify the techniques by looking at their tool marks on the front and their deformations on the back.

Conclusion

A good method by which to approach pierced jewellery is by studying the techniques involved in its manufacture. This was begun by the studies of Ogden, Schmidt, Niemeyer and Dandridge which identified two techniques. Now that six techniques have been recognised, our possibilities are multiplied. By examining all the material from a technical and stylistic point of view one may begin the task of identifying some of the workshops.¹⁴ If the techniques assume such an important rôle in the manufacture of pierced jewellery, it is because the primary value of these objects lay much more in their costly material as opposed to the artistic skills of the goldsmith. Special care was taken as to how the sheet of gold



Plate 22 The British Museum's ring: the perforating-chasing technique



Plate 23 The perforating-punching technique on the Lambousa necklace

was used in order to obtain the largest jewels from the smallest amount of gold. Goldsmiths were also looking for methods to simplify their work, the pierced openwork techniques being quite time-consuming because of the quantity of small patterns needed on each jewel. This is perhaps not particular to pierced openwork jewellery. Technical simplification by craftsmen can be observed in other kinds of Late Antique art, such as sculpture and painting. It goes together with the aesthetic changes that occur in the 3rd century in art in general. These aesthetic changes did not come from an inner evolution of jewellery. The forms used on larger scale works of art were the models for goldsmiths. As long as sculpture and painting followed the realistic aesthetics of Hellenistic art, pierced jewellery could not develop because its relatively flat surface is not suited to those shapes which strive to imitate nature in a realistic way. It is only in the 3rd century that pierced jewellery could develop, when realistic conventions were abandoned in art, and any kind of shape could be adopted to decorate the flat surface of these jewels without shocking the wearers, less used to the realistic reproduction of natural forms. Once the representation of any kind of form became possible, following the aesthetic changes in Late Antiquity, the principle concern of the goldsmiths became the techniques that they employed. The difference between pierced openwork jewellery and other forms of art is that the craftsman was not only looking for methods to simplify his work: he had a special interest in diminishing the weight of the jewels in order to make less expensive objects. This is why during the long history of pierced openwork jewellery from the 3rd to the 7th century at

least six different techniques were invented. Incompatible with the Hellenistic culture of the early Roman Empire, pierced jewellery was more suited to Late Antique society. Its development was ultimately made possible by the aesthetic and cultural changes of the 3rd century.

Notes

- 1 This paper is based on the first part of my doctoral study 'Les bijoux ajourés percés de l'Antiquité tardive', defended in the University of Paris IV Sorbonne under the direction of François Baratte, and the publication of which is in preparation.
- 2 For a general overview of the subject, see: A. Yeroulanou, *Diatripta. Pierced-work gold jewellery from the 3rd to the 7th century*, Benaki Museum, Athens, 1999.
- 3 See the fundamental works of Alois Riegl on the subject: A. Riegl, *Questions de style. Fondements d'une histoire de l'ornementation*, trans. H.-A. Baatsch and F. Rolland, Paris, 2002 (original ed. 1893); A. Riegl, *Die Spätromische Kunstindustrie*, Vienna, 1901.
- 4 Previous publications see generally only one technique, for example: B. Deppert-Lippitz, 'L'opus intarsiale des orfèvres romains', in C. Eluère (ed.), *Outils et ateliers d'orfèvres des temps anciens* (Antiquités nationales mémoire 2), Société des Amis du Musée des Antiquités Nationales et du château de Saint-Germain-en-Laye, 1993, 69–72.
- 5 J.M. Ogden and S. Schmidt, 'Late Antique jewellery: Pierced work and hollow beaded wire', *Jewellery Studies* 4 (1990), 5–12.
- 6 Pete Dandridge followed the observations of Ogden and Schmidt about this technique and developed them further in a study of a *fibula* in the Metropolitan Museum of Art, New York: P. Dandridge, 'Idiomatric and mainstream: The technical vocabulary of a Late Roman crossbow fibula', *Metropolitan Museum Journal* 35 (2000), 71–86.
- 7 Ogden and Schmidt (n. 5), 5, pl. 2.
- 8 B. Niemeyer, 'Der Lunulaförmige Halsschmuck aus Assiût in der Berliner Antikensammlung: eine Goldschmiedetechnische

Table: The tool marks and the deformations identifying the six techniques

Techniques	Burrs of variable shape	Folds of the sheet	Shavings coming from carving	Round burrs	Chasing	Punching
Cutting	•					
Cutting-carving	•		•	•		
Chasing-cutting		•			•	
Perforating-carving			•	•		
Perforating-chasing				•	•	
Perforating-punching				•		•

Analyse', *Jahrbuch der Berliner Museen* 39 (1997), 191–206; an abbreviated version of this paper has been published in English: *eadem*, 'A Byzantine gold collar from Assiût: A technological study', *Jewellery Studies* 8 (1998), 87–96.

- 9 On this more broadly and on the question of the workshops, see the future publication of my doctoral study 'Les bijoux ajourés percés de l'Antiquité tardive'.
- 10 The *perforating-punching* technique changes rapidly into a simple punching technique by omitting the perforation which is not really necessary. The *punching* technique is outside the scope of this

study, because the sheet is no longer pierced, but it is a continuation of the piercing techniques. It is the result of an extreme simplification of the work of the goldsmith.

- 11 Dandridge (n. 6), 74.
- 12 I would like to thank Catherine Metzger for permitting me to show this detail of a necklace in the Louvre, on which she is soon publishing a paper to appear in the *Revue du Louvre et des Musées de France*.
- 13 See the future publication of my doctoral study.
- 14 See n. 13.

Some Unconventional Early Byzantine Rings

Jeffrey Spier

Although many rings dating from the late 5th and early 6th century survive, no careful typological study of these has yet been undertaken.¹ The various shapes of Early Byzantine rings are, however, adequately documented in publications of individual museum and private collections.² These rings, like much of what is often termed the *koiné* style of Byzantine jewellery (found throughout the Empire), tend to fall into clear categories based on shape and technique, with a far more limited variety than was seen during the Roman Empire. Most of the shapes that emerged in the 6th century are distinctive and found in relatively large numbers, but there are some unusual types as well. This paper will examine three related aspects relating to the typology of Early Byzantine rings: some rare varieties of the late 5th century, some unconventional rings of the 6th–7th centuries, and the connection between rings of Byzantine origin and similar examples produced in the Germanic kingdoms in the West (Ostrogothic, Lombardic, Merovingian, Vandal, and Visigothic), a relationship that has not been particularly well documented.

Already by the mid-3rd century, after the fall of the Severan dynasty, a significant change in fashion is apparent. Gemstones were rarely engraved, and rings were set instead with old gems, unengraved gems, or coins. In the Constantinian period, rings became larger, with tubular hoops or hoops decorated with floral patterns (usually an acanthus wreath). Sometimes the hoops and bezels are hollow with embossed decoration.

Material from the late 4th and 5th centuries is poorly attested and difficult to classify, but evidence is provided by several late 5th century hoards of jewellery. Unfortunately, there is no trace of the greatest discovery of the period, the tomb of the empress Maria, wife of Honorius, who died around the year 400 and was buried in the now-destroyed chapel of St Petronilla in St Peter's in Rome.³ When the chapel was demolished in 1544, workmen found the tomb which contained, according to contemporary accounts, two silver boxes full of rings. Nothing appears to have survived or was even recorded with the exception of the so-called 'bulla,' a gold pendant studded with emeralds and garnets enclosing a cameo in the shape of a *chi-rho* monogram composed of the names of Maria and her family.⁴ The use of emerald and garnet is typical of the changing tastes in gemstones in Late Antiquity; these stones, along with sapphire, amethyst, and rock crystal, become the most popular stones for use in jewellery.

The most important and best recorded hoard of the late 5th century material was found at Reggio Emilia in 1957.⁵ The hoard, evidently belonging to an eastern Germanic official of some standing, contained jewellery of the highest quality, including necklaces and earrings set with garnets, a pair of Gothic *fibulae*, a gold *opus interrasile fibula* of Constantinopolitan manufacture denoting the owner's high official status,⁶ 15 gold rings, some set with gems, and gold



Plates 1a-b Gold ring set with an earlier intaglio, Byzantine, late 5th century. Private collection

coins of the late 5th century down to the time of Emperor Zeno (474–91). There is a notable variety of rings, but all display typically Late Antique characteristics, such as tubular hoops and hollow hoops with embossed floral (acanthus) decoration. Most of the rings are set with gems typical of the period (emerald, garnet, sapphire, and pearl), while other rings have bezels engraved with Gothic names or Latin monograms, a fashion introduced at the end of the 5th century.

One particular variety of ring is of special interest as it suggests ties to Constantinople. The shape is characterized by its ribbed, 'calyx'-shaped bezel set with a gem and joined to either a tubular or octagonal hoop. Two examples were present in the Reggio Emilia hoard, one with an unengraved nicolo, the other with a garnet.⁷ A number of similar rings are known, including one example set with a much older engraved gem probably of 1st century BC date (**Pls 1a–b**),⁸ another in a hoard of Byzantine jewellery from Istria, Romania, set with a contemporary engraved garnet,⁹ and a third discovered in Georgia, also with an engraved garnet.¹⁰ Other examples without recorded provenance are known as well.¹¹ An origin for the workshop in Constantinople is suggested by the eastern Mediterranean and Black Sea provenance of a number of rings, as well as the frequent use of contemporary engraved garnets cut in what I have defined as a prolific 'garnet workshop' in late-5th century Constantinople. Around 70 examples of garnets from the workshop have now been recorded, all of distinctive shape, style, and iconography.¹²

Engraved garnets from this workshop are also found set in a group of finely embossed rings, most of which have been discovered in Italy. One example was present in the Reggio Emilia hoard; its hoop is embossed with a floral pattern, and the garnet is engraved with a dolphin.¹³ Another hoard of jewellery and silver, said to have been discovered at or in the vicinity of Desana (Vercelli), contained nine gold rings, similar to the variety found in the Reggio Emilia hoard, including one of the embossed type set with a garnet engraved with a hare.¹⁴ A third embossed ring, set with an unengraved garnet, was found in a Gothic grave at Torriano, which also contained a pair of *fibulae* of Gothic type and a belt buckle.¹⁵ The finest



Plates 2a-c Gold ring set with an engraved garnet, Byzantine, late 5th century. London, British Museum (PE 72,6-4,313)



Plates 3a-c Gold ring set with an engraved garnet portrait of Theodosius II (401–50). Private collection



Plates 4a-b Gold ring set with an engraved garnet, Byzantine, 5th century. Vidin (Bulgaria), Historical Museum



Plates 5a-b Gold ring with niello inlay, Byzantine, late 5th century. Formerly Christie's, New York, Antiquities, 18 December 1998, lot 160



Plate 6 Gold ring with niello inlay, set with a garnet, Byzantine, late 5th century. Private collection



Plate 7 Gold ring with niello inlay and engraved monogram, Byzantine, late 5th century. Private collection

example of the embossed group, a ring in the British Museum, may also have been discovered in Italy (although no find site is recorded, it was purchased from the Roman dealer Alessandro Castellani) (Pl. 2).¹⁶ The engraved garnet shows an unusual image of a seated figure, his hands raised in prayer, likely depicting the emperor flanked by crosses. The hoop is finely embossed with floral motifs, tendrils, and birds. Although most of these rings have been found in Italy, the garnets are certainly from Constantinopolitan workshops, and the rings, too, were most likely produced there. The date for the group must be in the late 5th century in view of the coins in the Reggio Emilia hoard and the style of the gems. The rings, like the fine *opus interrasile* gold *fibulae*, were likely gifts bestowed as signs of official status and demonstrate direct communication between the Byzantine court and Gothic officials in Italy.

Engraved garnets from the same workshop in Constantinople are found in some other rings of similar date and related style and technique. They have different forms of 'calyx' bezel, often of high, stepped form. The finest and earliest datable example is the very large, hollow gold ring with its hoop embossed with an acanthus wreath and a stepped bezel set with a garnet engraved with a frontal portrait of the Emperor Theodosius II (401–50). The ring no doubt once belonged to an important imperial official or client king (Pls 3a–c).¹⁷ A simpler but typologically related ring was found in a hoard of jewellery from Ratiaria, Bulgaria, thought to date from the mid-5th century. It has a tubular hoop and stepped bezel set with a garnet engraved with a cross (Pls 4a–b).¹⁸

Also around this date (the mid- to late 5th century), ring bezels began to be engraved with personal names and monograms, a fashion that became increasingly popular. Rings bearing Latin monograms and both Roman and Gothic names were present in the Reggio Emilia and Desana hoards and have been found elsewhere in Italy as well. One ring from Reggio Emilia is inscribed with the names of a Gothic couple, Stafara and Ettila.¹⁹ A ring in the Desana hoard records the names Stefanus and Valatruda, perhaps a mixed marriage between a Roman and a Gothic woman.²⁰ Similarly, the grave of a Gothic, perhaps Gepidic, aristocrat discovered at Apahida in Romania contained spectacular gold and garnet jewellery, buckles, and *fibulae*, including an *opus interrasile* example from Constantinople, together with three rings.²¹ One ring is inscribed in Latin with the Gothic name Omharus, very likely the owner of the treasure. A second ring bears an engraved monogram that has been read as also representing the name Omharus.²² The letter forms are, however, Greek, and the identical monogram is used elsewhere for the common name Marias (the genitive form of Maria).²³ This ring was an import

from Constantinople, and although the commonly found, 'off-the-shelf' monogram could have been selected to denote Omharus, perhaps it is more likely that the ring belonged to the Gothic official's wife (a Greek?), named Maria. In any event, the fashion for rings with monograms, which had reached Gothic Italy by the late 5th century, certainly originated in Constantinople. Rings with Greek monograms of block type were widely used, and the style continued well into the 6th century, eventually to be replaced by cruciform monograms around 550.²⁴

Several other distinctive varieties of rings originated in Constantinople in the late 5th century and served as prototypes for Western copies. The Byzantine origin of one such group has become clear recently thanks to the appearance of several previously unpublished examples.²⁵ The rings have broad hoops, usually curved slightly inward, with flattened, triangular shoulders decorated with niello inlay and sometimes monograms. The bezels are stepped, with the top either engraved or set with a stone. The finest extant example has a partridge engraved on the bezel, niello-inlaid floral motifs and spirals on the shoulders, inlaid patterns of steps and waves on the sides of the bezel and hoop, and two engraved names EYTYXHOY and MAPIAC, '(of) Eutychios (and) Maria' (Pl. 5).²⁶ A second example, seemingly by the same goldsmith, has similar niello decoration on the shoulders and around the bezel but not on the hoop, and there are no names; the bezel is set with a cabochon garnet (Pl. 6). A third specimen is much smaller and lighter, with a cruder pattern of palmettes inlaid with niello on the shoulders; engraved on the top of the bezel is the Greek monogram for Marias, '(of) Maria' (Pl. 7). An example in silver with gilded top, in the Schmidt collection in Munich, is engraved with two monograms on the shoulders (Pl. 8).²⁷ All these are certainly eastern, likely from Constantinople.



Plates 8a–b Silver ring with gilding and engraved monograms, Byzantine, late 5th century. Munich, C.S. collection



Plates 9a-b Gold ring with niello inlay, set with a ruby, Gothic, late 5th century. London, British Museum (PE AF 483)



Plate 10 Bronze ring with engraved decoration, Visigothic, late 5th century. Private collection



Plates 11a-c Gold ring with niello inlay, set with an engraved emerald, Rome(?), 6th century. Madrid, Museo Lázaro Galdiano

Plate 12 Silver ring of 'architectural' form, Byzantine, mid-6th century. Toronto, Royal Ontario Museum



Plate 13 Gold ring of 'architectural' form, Merovingian, 6th century, from La Garde (Loire). Private collection

There are, however, western versions closely copying the shape of the originals. A gold ring with ruby setting is of the same shape and similarly has niello inlay on the triangular shoulders (**Pl. 9**).²⁸ It is said to be from Italy and was likely made there, as suggested by the unusual niello design, but bronze rings of similar shape and with the same distinctive decorative pattern on the shoulders were likely made in Visigothic Spain as well (**Pl. 10**).²⁹ A slightly later but closely related shape is seen on a particularly fine gold ring in the Museo Lázaro Galdiano in Madrid, which is set with an emerald engraved with busts of Peter and Paul (**Pls 11a-c**).³⁰ Around the bezel and on the triangular shoulders are carefully engraved Latin inscriptions and monograms with niello inlay, *AUGUSTINI VITA IN XPS*, 'Augustinus, life is in Christ,' and a pair of identical cruciform monograms best resolved as the name Augustinus. The cruciform monogram first appeared in Byzantium in the 520s³¹ and became increasingly popular; this ring may date c. 550 or slightly later. Another fine ring, once in

the Guilhou collection and likely from Italy (purchased from Castellani again) also has triangular shoulders and even more elaborate niello inlay.³² The bezel is set with an emerald and two garnets. The Latin inscription around the bezel reads, *MICHAEL MECV VIVAS IN DEO*, 'Michael, live with me in God'. The fine floral decoration on the shoulders finds a close parallel on the remarkable gold reliquary cross discovered in 1863 in the church of San Lorenzo fuori le mura in Rome and now in the Vatican Museums collection, which in addition bears block monograms and Latin inscriptions.³³ Both ring and cross must come from the same mid- 6th-century workshop, probably in Rome.

During the 6th century, a number of new varieties of rings were introduced by workshops in Constantinople, and some of these proved influential on tastes in the west. The most popular type of Byzantine ring had a tubular or octagonal hoop joined to a separately worked flat bezel (round, square, cruciform, or floral-shaped), which was engraved with a



Plate 14 Gold ring with double-diamond bezel, Byzantine, 6th century. Toronto, Royal Ontario Museum



Plate 15 Gold rings with double-diamond bezels, Lombardic, late 6th–7th century, from Castel Trosino. Rome, Museo dell'Alto Medioevo

monogram, religious invocation, or iconographic device (such as Christ, the Virgin, a saint, or an eagle with wings spread). Somewhat surprisingly, rings of this type had little influence in the West. Other Byzantine rings were more elaborate, notably those with tall, conical, or calyx-shaped bezels ringed with pearls and set with rock crystal, garnet, emerald, sapphire or pearl, with broad hoops, sometimes embossed or executed in openwork. All these varieties of rings have been found together in hoards, demonstrating their contemporaneity. They may well derive from the same goldsmiths' ateliers that produced other types of jewellery, such as earrings, necklaces, small crosses and various forms of pendants.³⁴

Two types of rings of relatively simple construction appear to have originated in Constantinople and achieved great popularity in the Gothic West in more elaborate versions. The Byzantine prototypes of both varieties were included in an interesting hoard of silver jewelry, including coins, belt buckles and tabs, a spoon, an amuletic silver armband, fragments of pendants, and at least eight rings, all datable to the mid-6th century, now in Toronto. The shape of one of the rings can be described as 'architectural.' The tubular hoop is attached to a bezel composed of a square platform and four pieces of filigree wire bent into semi-circles terminating in spirals, which support a hemispherical, dome-like element; additional pellets sometimes ornament the joins and the top of the dome (**Pl. 12**).³⁵ In addition to the silver example in Toronto, specimens in gold are in the Benaki Museum and in the Stathatos Collection in the National Archaeological Museum, Athens, the latter said to be from the island of Chios.³⁶

The architectural shape reached the West, but there became far more elaborate in decoration. An example found in the church of Madonna dell'Orto in Rome has a heavy openwork hoop decorated with beaded wire; the filigree 'columns' on the bezel support a pyramidal 'roof' ornamented with granulation.³⁷ Merovingian examples, which survive in some quantity, tend to be even more complex, adding filigree wire and granulation to band hoops and pyramidal tops, some set with garnets or other gems (**Pl. 13**).³⁸ Examples reached Spain as well.³⁹ Heavier versions, with squat 'columns' and bezels either engraved or set with gems, are typically found in Alamannic and Germanic sites in Germany and Eastern Europe, although at least one was discovered in Gaul.⁴⁰

The second variety of ring is not well attested in Byzantine finds, but three examples in silver were present in the Toronto hoard. Another example in gold, not from the hoard but certainly of Byzantine manufacture judging from its style, is in

the same collection (**Pl. 14**).⁴¹ These rings have band hoops, curved inward, and are distinctive for their bezel decorated with two raised, diamond-shaped elements placed side-by-side and outlined in beaded wire filigree, with some additional filigree on the shoulders. This variety, too, reached the West, where typically they had broad bands and were decorated with elaborate filigree and granulation. They are well attested, both in gold and silver, at Lombardic sites, most notably the 6th–7th-century burials at Castel Trosino, near Rome (**Pl. 15**).⁴² A few Merovingian examples, very similar to those from Rome, have been found in Gaul.⁴³

A final group of elaborately constructed rings with complex bezels set with precious stones is poorly documented, but these rings, too, appear to have originated in Byzantium and found favour in the Gothic west. Without further provenance information, however, it is difficult to form a clear picture of their development. One type is distinguished by its unusual double-bezel taking the form of a large central setting (oval, rectangular, or diamond-shaped) with an additional element, often a small cone outlined in filigree, attached to the side of the ring. Both elements are set with gems or pearls. Rings with double-bezels of this type may date as early as the 3rd century,⁴⁴ but a number of examples are clearly of 6th or early 7th century date. A very fine gold example set with an emerald and a garnet appears to be Byzantine,⁴⁵ as does another with a band hoop and 'calyx' bezel set with a garnet and a pearl.⁴⁶ A remarkable variant in the Stathatos collection in Athens has a rectangular central element set with a large garnet and decorated with a border of granulated pyramids, while a small bezel on the side has a hinged gold foil cross that served as a cover for the compartment (perhaps for a relic?).⁴⁷ A very similar example is in a private collection in Munich. Simpler versions, which have appeared on the market in recent years without recorded provenance, also may be Byzantine.⁴⁸ Several others of slightly more ornate form have been discovered in Gaul and are likely of Merovingian origin.⁴⁹

A related type of ring adds an 'architectural' feature of four 'columns' supporting a rectangular bezel set with a gem. One example decorated with filigree and set with a large garnet is thought to be from Italy (**Pls 16a–b**).⁵⁰ A ring in the Hashimoto collection combines this variety of 'architectural' ring with the double-bezel group by adding a small second bezel of conical shape to the side of the ring, along with filigree wire decoration (**Pl. 17**).⁵¹ Another example in a private collection is similar, but it is set with a rock crystal engraved with a cross (the engraved side set face down) and a garnet in the small, conical side bezel



Plates 16a–b Gold ring, set with garnet, Lombardic (?), late 6th–7th century. Private collection



Plate 17 Gold ring with double bezel, Byzantine or Merovingian, 6th–7th century. Tokyo, Hashimoto collection



Plates 18a–b Gold ring with double bezel, set with engraved rock crystal and garnet, Byzantine, 6th–7th century. Private collection

(Pls 18a–b). The engraved rock crystal very likely is a product of a late 6th- or early 7th-century workshop perhaps located in Antioch; other rock crystals of this type were set in pendants, although no other recorded specimen is in a ring.⁵² Like other rings of 6th–7th century date, these elaborately constructed double-bezel and architectural rings, although difficult to categorise with the little information available, appear also to have originated in Byzantium before finding their way West.

Notes

- For the typology of rings dating from the imperial period, see the useful surveys in: F.H. Marshall, *Catalogue of the Finger Rings, Greek, Etruscan and Roman, in the Departments of Antiquities British Museum*, London, 1907, xlv–xlix; F. Henkel, *Die römischen Fingerringe der Rheinlande*, Berlin, 1913.
- See, for example, M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection*, vol. 2, *Jewelry, Enamels, and Art of the Migration Period*, Washington DC, 1965; G. Vikan, 'Early Christian and Byzantine Rings in the Zucker Family Collection,' *Journal of the Walters Art Gallery* 45 (1987), 32–43.
- J. Spier, *Late Antique and Early Christian Gems*, Wiesbaden, 2007, 1–2; the contemporary accounts of the discovery of the tomb are gathered by P. Mazzuchelli, *La Bolla di Maria, moglie d'Onorio imperatore che si conserva nel Museo Trivulzio, brevemente spiegata*, Milan, 1819.
- Spier (n. 3), 138, no. 752; P. Pasini (ed.), 387d.c. *Ambrogio e Agostino. Le sorgenti dell'Europa*, Milan, 2003, 441, no. 339 (E. Galletti).
- M. Degani, *Il Tesoro Romano Barbarico di Reggio Emilia*, Florence, 1959.
- For fibulae of this type, see B. Deppert-Lippitz, 'A Late Antique Gold Fibula in the Burton Y. Berry Collection', in A. Calinescu (ed.), *Ancient Jewelry and Archaeology*, Bloomington and Indianapolis, 1996, 235–43; and for objects presented as imperial largess, see R. MacMullen, 'The emperor's largesses', *Latomus* 21 (1962), 159–66.
- Degani (n. 5), 61, nos 5–6, pl. 22, 2–5.
- Spier (n. 3), 91, n. 11, pl. 138, fig. 7.

- Ibid.*, 87, no. 483.
- Ibid.*, 87, no. 486.
- Ibid.*, 91, n. 11; for another, set with a plasma intaglio, see H. Battke, *Geschichte des Ringes*, Pforzheim, 1953, 37–8, no. 45, pl. 8; R. Hadjadj, *Bagues mérovingiennes. Gaule du Nord*, Paris, 2007, 290, no. 359, records several specimens from Gaul, but, like the examples from Italy, these are likely Byzantine imports.
- Spier (n. 3), 87–92.
- Degani (n. 5), 62, no. 8; Spier (n. 3), 88, no. 504.
- V. Bierbrauer, *Die ostgotischen Grab- und Schatzfund in Italien*, Spoleto, 1974, 270–1, pl. 12, 8; Spier (n. 3), 88, no. 508.
- Bierbrauer (n. 14), 318–20, pls 42–3; Spier (n. 3), 90, n. 8.
- Spier (n. 3), 89 and 92, no. 522.
- Ibid.*, 25–6, no. 76.
- D. Giorgetti, 'Trésor de parures d'or et d'objets d'argent', *Archeologia* (Sofia) 3 (1988), 32, no. 4, fig. 6; Spier (n. 3), 89, no. 512.
- Degani (n. 5), 63, no. 15, and the commentary on the Gothic names on this and related rings, 79–110 (C.A. Mastrelli); for similar rings with Gothic names, see also: O.M. Dalton, *Franks Bequest. Catalogue of the Finger Rings, Early Christian, Byzantine, Teutonic, Mediaeval and Later*, London, 1912, 3, no. 11 (Blithia and monogram) and 23, no. 146 (Gundehildis); Hadjadj (n. 11), 343, no. 470.
- Bierbrauer (n. 14), 270, pl. 12, 7.
- M.C. Bianchini (ed.), *L'or des princes barbares du Caucase à la Gaule Ve siècle après J.-C.*, Paris, 2000, 184–90, nos 30, 3, and 30, 4.
- J. Werner, 'Namensring und Siegelring aus dem gepidischen Grabfund von Apahida, Siebenbürgen', *Kölner Jahrbuch für Vor- und Frühgeschichte* 9 (1967–68), 120–3, who recognized that the letter forms are Greek but believed the monogram should be resolved as Omharus, which is conceivable.
- See the Byzantine ring, Pl. 7 above, and the garnet, Spier (n. 3), 90, no. 538.
- See, for example, O.M. Dalton, *Catalogue of Early Christian Antiquities and Objects from the Christian East in the Department of British and Mediaeval Antiquities and Ethnography of the British Museum*, London, 1901, 27, nos 168 and 170; G. Taylor and D. Scarisbrick, *Finger Rings. From Ancient Egypt to the Present Day*, Oxford, 1978, 42, no. 201; G. Schlumberger and A. Blanchet, *Collections Sigillographiques*, Paris, 1914, 180, no. 605, pl. 25, 9

- (which should be read as 'Konstantinou'); C. Stiegemann, *Byzanz. Das Licht aus dem Osten*, Mainz, 2001, 328–9, no. IV.63 (J. Spier), read as perhaps 'Eugenios'.
- 25 J. Spier, 'Un anillo bizantino-occidental en el Museo Lázaro Galdiano', *Goya. Revista de Arte* 216 (1990), 328–30, first discusses the group, but a number of additional examples have since come to light.
 - 26 Christie's, *New York, Antiquities*, 18 December 1998, lot 160; there are superb modern forgeries of this ring in both gold and silver.
 - 27 Spier (n. 25), 329, fig. 4; collection C.S., Munich.
 - 28 Dalton (n. 19), 28, no. 176a; for another gold ring of similar shape, said to be from S. Angelo dei Lombardi in Campania, see Marshall (n. 1), 138, no. 846.
 - 29 Private collection, unpublished; see also, Wm. Reinhart, 'Los anillos Hispano-Visigodos', *Archivo español de arqueología* 20 (1947), 177, fig. 3, nos 65 and 69.
 - 30 Spier (n. 3), 99 and 101, no. 579.
 - 31 The earliest datable cruciform monograms are those of the Emperor Justin I (518–27), which appear on small bronze coins struck at Antioch, for which see M. Phillips and S. Tyler-Smith, 'A sixth-century hoard of nummi and five-nummi pieces', *Numismatic Chronicle* (1998), 318 and 322.
 - 32 M. Deloche, *Anneaux sigillaires*, Paris, 1900, 306–7, no. CCLVI; Spier (n. 25), 330, fig. 6.
 - 33 G.B. De Rossi, 'La croce d'oro rinvenuta nella basilica di San Lorenzo', *Bullettino di Archeologia Cristiana* 1 (1863), 33–8; F. Bisconti and G. Gentili (eds), *La Rivoluzione dell'immagine. Arte paleocristiana tra Roma e Bisanzio*, Milan, 2007, 172–3, no. 37 (C. Lega).
 - 34 See, for example, the hoard of jewellery said to be from Syria and now in Washington, which includes six rings of different shapes: Ross (n. 2), 135–9, no. 179A-S.
 - 35 Royal Ontario Museum, inv. no. 986.101.102.
 - 36 B. Segall, *Katalog der Goldschmiede-arbeiten: Museum Benaki, Athen*, Athens, 1938, 162, no. 356, pl. 50; É. Coche de la Ferté, *Collection Hélène Stathatos: les objets byzantins et post-byzantins*, Limoges, 1957, 15–17, pl. 1, 3; another silver example, said to have been found in Lebanon with other rings, is in Munich: L. Wamser and G. Zahlhaas (eds), *Rom und Byzanz. Archäologische Kostbarkeiten aus Bayern*, Munich, 1998, 217–8, no. 318; for a gold example with a cameo set in the bezel: Spier (n. 3), no. 751; and another set with an emerald: D. Scarisbrick, *Historic Rings. Four Thousand Years of Craftsmanship*, Tokyo, New York and London, 2004, 43–4, no. 104 (Hashimoto collection, Tokyo).
 - 37 F. Gaultier and C. Metzger (eds), *Trésors antiques. Bijoux de la collection Campana*, Milan, 2005, 148, no. III.9; see also an example said to be from Milan: Dalton (n. 19), 27, no. 174.
 - 38 Hadjadj (n. 11), 74–7, nos 246, 253, 259, 325, 378, 393, 482, 483, 493, 499, 534, 561, 569, 587, 594. Pl. 13, from La Garde (Loire) and now in a private collection, is published in Deloche (n. 32), pl. 4, 11, and Hadjadj (n. 11), no. 587; S. Hindman, *Towards an Art History of Medieval Rings. A Private Collection*, London, 2007, 70–3 and 217–18, no. 10. One ring probably of Merovingian origin was discovered in a 7th-century Avar grave in Hungary: F. Daim, 'Avars and Avar archaeology: an introduction', in H.-W. Goetz, J. Jarnut and W. Pohl (eds), *Regna and Gentes. The Relationship between Late Antique and Early Medieval Peoples and Kingdoms in the Transformation of the Roman World*, Leiden and Boston, 2003, 491, pl. 25, 2; I am grateful to Falko Daim for this information. See also the architectural element of a ring used as the head of a pin, probably from a Merovingian grave: O. van Hessen, *Museo Nazionale del Bargello. Gioielli franchi della collezione Carrand*, Florence, 1981, 11, pl. 1b.
 - 39 A ring very similar to Merovingian examples was found at Torredonjimeno: Reinhart (n. 29), 169, fig. 1, 4a; a more unusual ring set with a pearl, said to be from Alcudia (Elche) and allegedly found with other rings, jewellery, and 4th-century coins, appears to date much later than the 4th century: see, H. Schlunk and T. Hauschild, *Hispania Antiqua*, Mainz, 1978, 157, pls 48b and 49b (private collection of A. Ramos Folqués).
 - 40 For example: a gold ring from a woman's grave at Samobor (Zagreb), Croatia: W. Menghin, T. Springer and E. Wamers (eds), *Germanen, Hunnen und Awaren*, Nürnberg, 1987, 191 and 196, IV, 8.a; another gold ring from a 6th-century woman's grave at Donzdorf (Baden-Württemberg): H. Roth, *Kunst und Handwerk im frühen Mittelalter*, Stuttgart, 1986, pl. 44b; a gold ring engraved with a monogram: A.B. Chadour, *Ringe. Die Alice und Louis Koch Sammlung*, Leeds, 1994, vol. 1, 151, no. 507; a silver example of unknown provenance, once set with a stone: C.C. Oman, *Victoria and Albert Museum. Catalogue of Rings*, London, 1930, 65, no. 235, pl. 9; and a gold ring, finely carved and engraved with a male head in profile and an inscription, discovered at Saint-Pierre (Ardèche): Deloche (n. 32), 234–5, no. CCX.
 - 41 Royal Ontario Museum, Inv. no. 986.181.1; the silver rings are inv. nos 986.101.103.1–2.
 - 42 G. Becatti, *Oreficerie antiche dalle minoiche alle barbariche*, Rome, 1955, 221–2, nos 579–80; C. Bertelli and G.P. Brogiolo (eds), *Il futuro dei longobardi. L'Italia e la costruzione dell'Europa di Carlo Magno*, Milan, 2000, 42, fig. 15, 48, no. 12d.
 - 43 Hadjadj (n. 11), nos 87 and 97, both silver, and an unpublished gold example.
 - 44 Chadour (n. 40), 124, no. 426, set with emeralds.
 - 45 A.B. Chadour and R. Joppien, *Kunstgewerbemuseum der Stadt Köln. Schmuck II, Fingerringe*, Cologne, 1985, 104, no. 15.
 - 46 Chadour (n. 40), 144, no. 484.
 - 47 A.K. Orlandos, *Collection Hélène Stathatos: objets antiques et byzantins*, Strasbourg, 1963, 289, no. 23obis, pl. 44; L. Kötzsche-Breitenberg, 'Zum Ring des Gregor von Nyssa', in E. Dassmann and K. Thraede (eds), *Tesserae. Festschrift für Josef Engemann*, Münster, 1991, 291–8, pl. 38. In the late 4th century, St Macrina, the sister of Basil of Caesarea and Gregory of Nyssa, was said to have worn an iron ring which contained a piece of the True Cross (Gregory of Nyssa, *Vita Macrinae*), but no ring that served as a reliquary appears to survive.
 - 48 Hadjadj (n. 11), 346–7, no. 474, Content collection, formerly Christie's, *New York, Ancient Jewelry*, 7 December 2006, lot 309, set with an amethyst and a pearl; a very similar example set with a garnet appeared the following year: Christie's, *New York, Ancient Jewelry*, 6 December 2007, lot 468; an example in the British Museum, Marshall (n. 1), 133, no. 815, set with a plasma and a partially drilled sapphire, does not have a recorded provenance.
 - 49 Hadjadj (n. 11), 83 and 346–7, nos 173, 330, 403, 426 and 474, who discusses the group and notes further examples from Eastern Europe; see also the example set with a sapphire in the Victoria & Albert Museum, which is said to be Merovingian: Oman (n. 40), 65, no. 239.
 - 50 Hindman (n. 38), 66–9 and 216–17, no. 9, as Lombardic, 7th century, although it may be earlier.
 - 51 Scarisbrick (n. 36), 43, no. 103, formerly in the Adolphe Stoclet collection; the stones are missing.
 - 52 Spier (n. 3), 115–26, nos 696–7 (crosses).

Notes on Selected Recent Acquisitions of Byzantine Jewellery at the British Museum¹

Chris Entwistle

The Department of Prehistory and Europe in the British Museum houses one of the largest known collections of Byzantine jewellery, numbering over 750 items. The collection underwent two major periods of expansion: in the late 19th century when it benefited in particular from the collecting activities of one of the Museum's principal Victorian characters, Sir Augustus Wollaston Franks, and in the last decades of the 20th century. This second collection phase reflected the diverse amount of interesting material available on the London market at the time combined with available funding. Much stricter acquisition regulations concerning provenance are now applied by the museum, meaning that the collection at present is essentially static. The 50 objects selected here are intended to give a flavour of the purchases made during the 1980s and early 1990s.

Belt-fittings²

Gold

1. Gold buckle

Byzantine, 7th century
L. 44mm, W. 19mm, Wt 16.10g
Reg. no. PE 1974.9-10.1



Gold buckle with lyre-shaped plate joined by a hinge to both tongue and loop. The ovoid loop, which has a moulded tongue-rest, is engraved with geometric ornament; the tongue is hollow-cast and has a basal cube engraved with similar ornament, which is replicated beneath the tip of the tongue and the reverse of the loop. The hinge consists of five rings, the two outer ones attached to the plate, two attached to the loop and one to the tongue, all threaded on a gold pin. The plate has a circular terminal ending in a knob, the terminal deeply engraved with a cruciform monogram resolving as ΑΓΑΠΙΟΥ ('of Agapios'); the rest of the plate is engraved with a symmetrical geometric design; three attachment lugs on the reverse, one damaged.

This is a variant (with movable plate) of Schulze-Dörrlam's Type D15.³ A not dissimilar buckle, found at Selinos in Crete, is in the Ashmolean Museum, Oxford.⁴ Like the Museum's example, it too has a lyre-shaped plate, a basal cube on the tongue with engraved decoration, and a round terminal decorated with a cruciform monogram possibly resolving as 'of Kassianos'; the centre of the plate differs, however, in being roughly

incised with two foliate motifs. Further examples of gold and silver buckles decorated with block or cruciform monograms include, *inter alia*, one said to have been found at Latakia, Syria, now in the Dumbarton Oaks Collection, Washington DC,⁵ one purportedly from near Hamah, Syria, in the Walters Art Museum, Baltimore,⁶ and a final example in the Benaki Museum, Athens.⁷

The decoration under the tip of the tongue, composed of crescents, triangles and dots, is intriguing. It can have served no obvious decorative function being invisible to the viewer and it may well represent either a craftsman's or a workshop mark. How common or not a feature this is on 7th-century buckles is hard to tell given that the reverses of published buckles are unfortunately rarely illustrated. It is not, however, a unique feature to this buckle as exemplified by analogous motifs on a further buckle in the Museum's collection (see the next example) and others in the Dumbarton Oaks Collection,⁸ the Walters Art Museum,⁹ the Archäologische Staatssammlung, Munich,¹⁰ the Byzantine and Christian Museum, Athens,¹¹ and the Stathatos Collection, now in the National Archaeological Museum, Athens.¹²

Unpublished.

2. Gold buckle

Constantinople (?), 7th century
L. 98mm, W. 39mm, Wt 52g
Reg. no. PE 1980.7-8.1



Gold buckle with cruciform plate joined by a hinge to both tongue and loop. The loop consists of eight scallops, visible from above

as twin trefoils, the top edge deeply incised with 'dot and comma' ornament. The tongue is hollow-cast, punched on the top in a fret design and under the tip of its tongue with a craftsman's (?) mark. The hinge consists of five rings, the two outer ones attached to the plate, two attached to the loop, and an inner 'double ring' being part of the tongue, all threaded on a gold pin; near the hinge, the plate is chip-carved in an engrailed design in the 'dot and comma' motif. The rest of the plate is embossed with a Latin cross, the head and arms scalloped and the foot terminating in a roundel; the decoration, stamped from either side, consists of concentric punch-marks with rosette bosses in the corners of the cross, at the intersection of the arms and in the centre of the roundel at the foot. The plate has a side running all round it, but no back plate was ever fitted; on the reverse, four attachment lugs.

Although numerous copper-alloy buckles with cruciform plates have survived,¹³ I know of no examples made of gold. The closest parallel to this buckle is one in the Dumbarton Oaks Collection, Washington DC,¹⁴ which replicates the shape of the tongue and loop, the construction of the hinge, the use of a fret design on the top of the tongue and, on the loop, of the 'dot and comma' ornament. The decorative technique of the plate is also very similar with its concentric punch-marks and bosses stamped from behind and an identical chip-carved engrailed design. A final analogous feature is the use of the leaf-shaped motif under the tip of the tongue, which is so close as to suggest that the two buckles may have been made in the same workshop. The Dumbarton Oaks buckle was said to have come from a small treasure consisting of a necklace, a pendant cross, a bracelet, a pair of earrings, and a gold and niello marriage ring, all probably dating on stylistic grounds to the first half of the 7th century. The British Museum buckle also shares certain technical features with another gold buckle in the Dumbarton Oaks Collection, this of Werner's Type 'Trebizond', which was said to have been found with two *solidi* of Heraclius from the mint of Constantinople (613–30).¹⁵

Published: Cormack and Vassilaki (n. 11), no. 132, 179 and 412.

3. Gold strap end

Byzantine, 7th century
L. 30mm, W. 24mm, Wt 7.60g
Reg. no. PE 1982,5-7,1



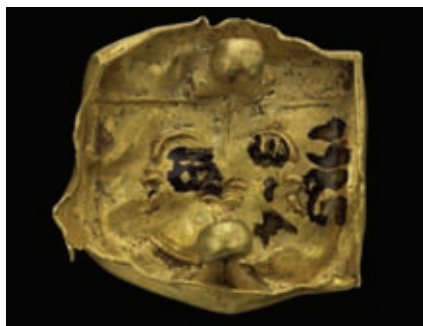
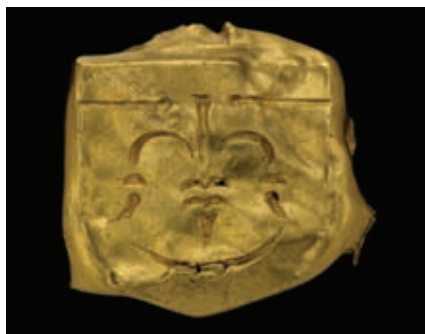
Gold strap end of hollow-box construction, shield-shaped, with rounded end, straight sides, and an aperture for the strap. The front is decorated with a heart-shaped motif with punched geometric ornament, including the 'dot and comma' design, above and below; the border is embossed and chased in imitation of swaged wire and granulation. On the back is a central vegetal motif with further geometric ornament.

Similar pieces are known from the Mersin treasure in Turkey¹⁶ and from near Naples in Italy¹⁷ to name but a few. Particularly close parallels for the geometric ornament can be seen on belt-fittings from Kunágota and Ozora-Tótipusztá in Hungary.¹⁸ The form was also imitated in bronze.¹⁹ This and the following two examples probably belonged to composite belt-sets.

Published: Andrási (n. 17), 74–5, fig. 10; Cormack and Vassilaki (n. 11), no. 133, 179 and 412.9.

4. Gold mount

Byzantine, late 6th–7th century
L. 18mm, W. 17mm, Wt 2.69g
Reg. no. PE 1985,3-4,18



Gold mount of thin sheet, shield-shaped (now badly buckled), with down-turned edges; punched 'dot and comma' and other geometric ornament beneath a line across the top; on the reverse, two attachment lugs.

Mounts of this simple form and construction are known from, *inter alia*, the Crimea,²⁰ Syria,²¹ Italy²² and Hungary,²³ and are too numerous to list here.

Unpublished.

5. Gold strap end

Byzantine, 7th century
L. 43.2, W. 21mm, Wt 9.75g
Reg. no. PE 1986,10-1,1



Gold strap-end of hollow box construction with openwork head-plate, straight sides and a vesica-shaped foot; the strap held in place by two rivets, one now missing; the centre of the plate decorated with a stylised symmetrical foliate motif enclosed by engraved and punched 'dot and comma' and other geometric ornament. On the reverse is an elongated double-lobed opening.

Published: Andrási (n. 17), 74, no. 1, fig. 9.

Silver**6. Silver buckle**

Byzantine, 7th century
L. 42.8mm, 21.2mm
Reg. no. PE 1993,6-1,1



Silver buckle with ovoid loop and moulded tongue-rest; the tongue-shaped plate is engraved with a symmetrical foliate motif; pierced at the base of the plate; on the reverse, two attachment lugs.

The highly stylised symmetrical foliate motif with scroll-like terminals is reminiscent of the ornament found on some of the brooches and belt-fittings from Martynivka, some of the horse-fittings and belt-tabs from Nocera Umbra, and on some of the belt-tabs from Kiskörös and Kunágota in Hungary.²⁴

Unpublished.

Copper-alloy**7. Gilded copper-alloy buckle-plate**

Byzantine, 7th century
L. 70.5mm, W. 28.3mm
Reg. no. PE 1984,10-4,1



Gilded copper-alloy buckle-plate with waisted profile and two hinges at the top and a small projecting knob at the bottom. The plate is decorated with the figure of a crocodile enclosed by three contiguous borders: the outer imitating square-toothed wire, the middle in the form of a debased herring-bone pattern, and the inner in the form of a snake's body terminating in two snakes' heads. At the head of the plate, chip-carved decoration possibly representing two confronted quadrupeds; on the reverse, three attachment lugs.

This belongs to Werner's Type 'Trebizond',²⁵ with examples known in both gold²⁶ and bronze.²⁷ An example of the former, now in the Dumbarton Oaks Collection, is decorated with a sea-monster instead of a crocodile; it was found with two *solidi* of Heraclius.²⁸

Unpublished.

8. Copper-alloy buckle-plate

Byzantine, c. 650–750
Said to have been found in Sicily.
L. 42mm, W. 25mm
Reg. no. PE 1991,12-8,2



Copper-alloy buckle-plate with two hinge-loops and an openwork, sub-triangular plate terminating in a medallion; the medallion engraved with a seated (?) figure at left apparently blessing a smaller figure at right; in the field, two crosses; on the reverse, three attachment lugs.

This belongs to Werner's Type 'Corinth' and Csallány's Group 7,²⁹ which enjoyed a wide geographical distribution with examples found in Spain,³⁰ Sardinia and mainland Italy,³¹ Sicily,³² Greece,³³ Albania,³⁴ Bosnia,³⁵ Hungary,³⁶ the Czech Republic,³⁷ the Crimea³⁸ and Turkey.³⁹ The medallions on these buckles are variously decorated with chevrons, crosses, cruciform monograms, ring and dot motifs, or diminutive figures, the latter in some instances perhaps representing a stylised Annunciation.

Unpublished.

9. Copper-alloy buckle

Byzantine, 6th–early 7th century
L. 53.8mm, W. 32.3mm
Reg. no. PE 1989,4-2,I



Copper-alloy buckle with trapezoidal loop and a tongue-shaped plate with an openwork face-mask design; the tongue, which has a basal rectangle, is threaded through a hole at the top of the plate and fused to the top of the loop; on the reverse, three broken attachment lugs.

This buckle belongs to Schulze-Dörrlamm's Type D2, a slight variant of

Werner's Type 'Sucidava'. Its distribution is largely restricted to the Crimea and Romania, although examples from Macedonia⁴⁰ and Egypt⁴¹ are also known.

Unpublished.

10. Copper-alloy buckle

Byzantine, late 6th–early 7th century
L. 52.2mm, W. 29.5mm
Reg. no. PE 1984,10-4,2



Copper-alloy buckle with openwork plate and ovoid hoop with moulded tongue-rest; the tongue, which has a basal cube, is threaded through a hole at the top of the plate; the plate engraved with simple geometric decoration; on the reverse, three attachment lugs, two of which are broken.

This appears to be a slight variant of Schulze-Dörrlamm's Types D7 and D8, examples of which are known from Egypt, the Crimea, Morocco and Spain.⁴² Although sharing the same form of hoop, tongue, plate, and engraved ornament resembling hatching, they differ from the Museum's example in the openwork designs of their plates which form either a cross or a vertical bar with two internal volutes.

Unpublished.

11. Copper-alloy buckle

Byzantine, c. 600–50
L. 42mm, W. 23mm
Reg. no. PE 1980,11-6,5



Copper-alloy buckle with ovoid loop with tongue-rest and lyre-shaped plate terminating in a roundel engraved with a cruciform monogram resolving as ΓΕΩΡΓΙΟΥ ('of Georgios'); the tongue missing; on the reverse, two attachment lugs, one broken.

This belongs to Schulze-Dörrlamm's Type D15.⁴³ An identical example is known from S. Mauro Sotto (Caltagirone) in Sicily.⁴⁴ Other examples of this type, but with different cruciform monograms, are known from Athens,⁴⁵ Medinet-el-Fayum in Egypt,⁴⁶ the shipwreck at Yassi Ada off the south-western coast of Turkey,⁴⁷ the Uluköy-Hacolar region, Afyon, also in Turkey,⁴⁸ and from Szekszárd-Bogyiszlói in Hungary.⁴⁹

Unpublished.

12. Copper-alloy buckle

Byzantine, late 6th - middle of 7th century
L. 42.2mm, W. 24.5mm
Reg. no. PE 1980,11-6,6



Copper-alloy buckle with cruciform plate, ovoid loop with tongue-rest, and tongue with basal cube; the plate decorated with ring and dot ornament; two attachment lugs on the reverse.

This buckle is a slightly larger variant of Schulze-Dörrlamm's Type D22, a type which enjoyed a wide distribution throughout the Mediterranean and its hinterlands with particular concentrations in the Crimea and Asia Minor.⁵⁰

Unpublished.

13. Copper-alloy buckle-plate

Sicily (?), second half of 7th century - early 8th century
H. 29.5mm, W. 42mm
Reg. no. 1983,10-I,12





Copper-alloy buckle-plate with two hinge-loops; the U-shaped plate cast and punched in low relief with a lion with frontal head to left; on the reverse, three attachment lugs, one of which is broken.

A number of similar examples have been found at Cava Ipsica, Comiso and Syracuse in Sicily.⁵¹ A slight variant of this type, showing a lion fighting another animal, is known from Corinth.⁵²

Unpublished.

14. Copper-alloy buckle-plate

Sicily (?), second half of 7th century–early 8th century

L. 41mm, W. 28mm

Reg. no. PE 1991,12-8,1



Copper-alloy buckle-plate with two hinge-loops; the U-shaped plate cast and punched in low relief with a lion with frontal head to left; the side-plate engraved with linear ornament; on the reverse, three attachment lugs.

Unpublished.

15. Copper-alloy buckle-plate

Sicily (?), 7th century

L. 50mm, W. 26.3mm

Reg. no. PE 1990,6-4,9



Copper-alloy buckle-plate with two hinge-loops and a plate of insect-like form with knobbed terminal, punched wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs.

This and the following six examples all have plates which have been described in the literature as 'insect-like', with the degree of stylisation more pronounced the smaller the plates become. Their distribution seems to be almost entirely restricted to the western and central Mediterranean, namely Spain,⁵³ Italy⁵⁴ and Sicily.⁵⁵

Unpublished.

16. Copper-alloy buckle-plate

Sicily (?), 7th century

Said to have been found in Sicily.

L. 51.5mm, W. 26.5mm

Reg. no. PE 1995,11-7,1



Copper-alloy buckle-plate with two hinge-loops and a plate of insect-like form with knobbed terminal, wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs.

Unpublished.

17. Copper-alloy buckle-plate

Sicily (?), 7th century

Said to have been found in Sicily.

L. 41.9mm, W. 26.5mm

Reg. no. 1995,11-7,2



Copper-alloy buckle-plate with two hinge-loops each with the remains of a corroded pin; the plate of insect-like form with wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs.

Unpublished.

18. Copper-alloy buckle-plate

Sicily (?), 7th century

Said to have been found in Sicily.

L. 37.8mm, W. 16.5mm

Reg. no. PE 1995,11-7,3



Copper-alloy buckle-plate with two broken hinge-loops and a plate of insect-like form with a knobbed terminal, wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs.

Unpublished.

19. Copper-alloy buckle-plate

Sicily (?), 7th century

Said to have been found in Sicily.

L. 38mm, W. 18mm

Reg. no. 1995,11-7,4



Copper-alloy buckle-plate with two hinge-loops, one of which is broken, and a plate of insect-like form with a knobbed terminal, wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs.

Unpublished.

20. Copper-alloy buckle-plate

Sicily (?), 7th century
Said to have been found in Sicily.
L. 37.50mm, W. 18mm
Reg. no. 1995,II-7,5



Copper-alloy buckle-plate with two broken hinge-loops and a plate of insect-like form with a knobbed terminal, wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs.

Unpublished.

21. Copper-alloy buckle-plate

Sicily (?), 7th century
Said to have been found in Sicily.
L. 31.50mm, W. 17.50mm
Reg. no. 1995,II-7,6



Copper-alloy buckle-plate with two hinge-loops with the remains of a pin and a plate of insect-like form with a knobbed terminal, wing-like mouldings and ring and dot 'eyes'; on the reverse, three attachment lugs, one broken.

Unpublished.

22. Copper-alloy buckle-plate

Sicily (?), second half of 7th–early 8th century
H. 22mm, W. 34.5mm
Reg. no. PE 1991,I-2,1



Copper-alloy buckle-plate with two hinge-loops with the remains of a corroded pin and a U-shaped plate; engraved and punched with the figure of a stylised bird to left; on the reverse, three attachment lugs.

Buckles of this form and stylised animal decoration have predominantly been found in the western Mediterranean, in particular Sicily⁵⁶ and Italy,⁵⁷ although examples from Greece are also known.⁵⁸

Unpublished.

23. Copper-alloy buckle-plate

Sicily (?), second half of 7th–early 8th century
H. 23mm, W. 35.5mm
Reg. no. PE 1991,I-2,2



Copper-alloy buckle-plate with one intact hinge-loop and a U-shaped plate; engraved and punched with the figure of a stylised animal (a lion ?) to left; on the reverse, three attachment lugs.

Like the previous example, buckles of this type tend to have been found in either Sicily⁵⁹ or southern Italy.⁶⁰

Unpublished.

24. Copper-alloy buckle-plate

Sicily (?), second half of 7th–early 8th century
H. 22mm, W. 32mm
Reg. no. PE 1991,I-2,3



Copper-alloy buckle-plate almost identical to no. 23, but with both hinge-loops and one of the attachment lugs broken.

Unpublished.

25. Copper-alloy buckle-plate

Sicily (?), second half of 7th–early 8th century
H. 23mm, W. 36mm
Reg. no. PE 1991,I-2,4



Copper-alloy buckle-plate with two hinge-loops with the remains of a corroded pin and a U-shaped plate; punched and engraved with an eight-pointed star; on the reverse, three attachment lugs.

Similar examples are known from Cotominello, San Mauro Sotto and Centuripe, all in Sicily.⁶¹

Unpublished.

26. Copper-alloy buckle-plate

Sicily (?), second half of 7th–early 8th century
H. 22.5mm, W. 34mm
Reg. no. PE 1991,I-2,5





Copper-alloy buckle-plate almost identical to no. 25, but one of the hinge-loops and one of the attachment lugs broken.

Unpublished.

27. Copper-alloy reliquary buckle

Sicily (?), 7th century
L. 25mm, W. 61.5mm, H. 16.2mm
Reg. no. PE 1991,6-2,1



Copper-alloy reliquary buckle with long rectangular body with rounded end; engraved on the front with two confronted quadrupeds; on the side-plate, further linear ornament; below the rim of the base a deep groove into which the missing back-plate would have fitted; each of the two hinge-loops has the remains of a corroded pin.

Like the preceding five examples this type of buckle seems to be almost exclusively a western Mediterranean type. It is typified by its deep long narrow body; either the front or the back could slide back to reveal the cavity for the relic. A rough *terminus post quem* for this type is provided by an analogous example in a private collection in Munich where the second animal is replaced by a cruciform monogram, invoking 'Theotokos, protect', suggesting a date of not before the middle of the 6th century.⁶² A not dissimilar example is from Prizzi in Sicily.⁶³

Unpublished.

28. Copper-alloy buckle-plate

Italy (?), 6th–7th century
L. 32.3mm, W. 22mm
Reg. no. 1991,10-7,1



Copper-alloy buckle-plate with four hinge-loops and intact pin; the plate engraved with a circle enclosing a Latin monogram; between the monogram and hinge, two foliate scrolls; on the reverse, three broken attachment lugs.

This buckle belongs to Type 'Hippo Regius' whose distribution is concentrated in the central Mediterranean.⁶⁴ The closest example to it is in a private collection in Munich which differs, however, in having the inscription ΦΩC/ΖΩΗ ('Light, life') instead of a monogram.⁶⁵ An Italian provenance is suggested by the form of monogram which closely resembles those found on the coinage of the Vandalic and Ostrogothic kings.⁶⁶

Unpublished.

29. Copper-alloy mount

Byzantine, 4th century
H. 34.8mm, W. 39.2mm
Reg. no. 1980,11-6,7



Copper-alloy mount in the form of a central openwork *chi-rho* attached to two rectangular openwork elements, each of which terminate in symmetrical vegetal motifs and attachment rings.

Unpublished.

30. Copper-alloy buckle

Byzantine, second half of 7th–early 8th century
L. 56mm, W. 26mm
Reg. no. PE 1985,10-10,1



Copper-alloy buckle with ovoid loop with moulded tongue-rest and a sub-triangular openwork plate terminating in an oval medallion engraved with a cross; at the junction of the plate and medallion, two pierced projections resembling stylised birds' heads in profile; the plate engraved and punched with circles and triangles; the loop, which is attached to the plate by two hinges, is bent almost at a right angle to the plate; on the reverse, two attachment lugs, one broken.

An almost identical example is known from Palmyra in Syria⁶⁷ and a slight variant from Jerash in Jordan.⁶⁸

Unpublished.

31. Gilded copper-alloy buckle

Byzantine, 6th–7th century (?)
L. 48.5mm, W. 22.2mm
Reg. no. PE 1985,10-10,2



Gilded copper-alloy buckle with ovoid loop with tongue-rest and a sub-pear-shaped plate engraved with a debased symmetrical foliate motif; the tongue is threaded through a hole at the top of the plate; on the reverse, two attachment lugs.

Unpublished.

32. Copper-alloy buckle

Byzantine, 7th century
L. 75mm, W. 28.3mm
Reg. no. PE 1990,7-2,1



Copper-alloy buckle with ovoid loop with moulded tongue-rest and the plate terminating in a medallion with a prominent knob; the tongue, which has a basal rectangle, is attached to the plate by a hinge composed of five loops; the medallion is cast and engraved with a wolf biting a horned animal; between the hinge and medallion, two stylised human faces; on the reverse, three attachment lugs.

I know of no exact parallels, but the arrangement of two stylised faces can be seen on Visigothic buckles from Spain.⁶⁹ The type would seem to be a variant of a complete version of no. 34, where the busts of Peter and Paul have become extremely stylised.⁷⁰

Unpublished.

33. Gilded copper-alloy buckle-plate

Byzantine, 7th century
L. 40.2 mm, W. 22.3mm
Reg. no. PE 1990,7-2,2



Gilded copper-alloy buckle-plate with two hinge-rings and a sub-ovoid plate terminating in a knob; the plate engraved with a symmetrical geometric pattern and, near the hinge-rings, with two lentoids and debased 'dot and comma' ornament; on the reverse, three attachment lugs.

The closest, but by no means exact parallel, is a gold buckle from the 7th-century Mytilene treasure on Lesbos.⁷¹ A not dissimilar bronze example was found in Grave 329 in the cemetery at Kölked-Feketekapu A, in Hungary.⁷²

Unpublished.

34. Gilded copper-alloy buckle fragment

Byzantine, 7th century
Max. D. 31.8mm
Reg. no. PE 1990,10-4,1



Gilded copper-alloy buckle fragment in the form of a medallion with a knob; embossed and engraved with a frontal bust of Christ with a cruciform nimbus, holding a book in his right hand, and with his left emerging from his robe in a gesture of benediction; around, a border imitating beaded wire.

Buckles with similar busts of Christ, but with two additional busts (the apostles Peter and Paul?), are in the Walters Art Museum,⁷³ a private collection in Munich,⁷⁴ and the Studium Biblicum Franciscanum Museum in Jerusalem.⁷⁵

Unpublished.

35. Gilded copper-alloy mount

Byzantine, 7th century
From Cyprus
H. 24.5mm, W. 24.2mm
Reg. no. PE 1995,11-7,9



Gilded copper-alloy mount; shield-shaped with angled profile; engraved and punched on the face with a stylised vase surrounded by 'dot and comma' ornament; on the reverse, two attachment lugs, one broken.

The vase-like motif, juxtaposed with 'dot and comma' ornament can be roughly paralleled on a buckle from grave 21a in the cemetery at Bóly and on another belt-fitting from grave 59 at Szeged-Csengele-Feketehalom, both in Hungary.⁷⁶

Unpublished.

36. Copper-alloy buckle-plate

Byzantine, 7th century
From Sicily.
L. 28mm, W. 19mm
Reg. no. PE 1995,11-7,8



Copper-alloy buckle plate in the form of an openwork heart with a projecting knob at its base; there are two hinge-loops with the remains of a pin and two attachment lugs on the reverse.

This belongs to Werner's Type 'Bologna'.⁷⁷ Examples are known from the Crimea,⁷⁸ Samos,⁷⁹ Mount Nebo,⁸⁰ Carthage,⁸¹ Corinth,⁸² Sicily,⁸³ Sardinia,⁸⁴ and mainland Italy.⁸⁵

Unpublished.

37. Copper-alloy buckle

Byzantine, 7th century
From Sicily.
L. 49mm, W. 32mm
Reg. no. PE 1996,11-7,7





Copper-alloy buckle, the tongue wanting; the oval openwork hoop with a moulded, grooved tongue-rest and a deep oblong depression at its base with the remains of a fastening pin for the tongue; the openwork plate with two moulded projections and a rectangular aperture through which the belt would have been threaded. The deep sides of the buckle-hoop have a slightly angled and rounded profile; the sides of the buckle engraved and pounced with stylised vegetal and geometric ornament.

Unpublished.

Necklace pendants

The following six objects, five pendants and a clasp, were found on the Karpas peninsula in northern Cyprus shortly before the First World War. Although the shape of the pendants is by no means uncommon for the Early Byzantine period,⁸⁶ they do share a number of unusual technical features which perhaps support a later date, in particular the different types and combinations of decorative wire employed, which include: beaded wire for the outer and inner borders (nos 38–42); undulating strip set edgeways and a running scroll of closed S-shapes (no. 38); undulating strip set edgeways and corrugated strip set facing (nos 39–40); and finally, corrugated strip set facing (nos 41 and 42). Both the undulating strip set edgeways and the border of closed S-shaped scrolls can be paralleled on rings, earrings, and necklace clasps normally dated to the 6th and 7th centuries,⁸⁷ although both types of wire can equally be found on Carolingian and Ottonian metalwork in the West and on 10th–12th century jewellery in the eastern Mediterranean.⁸⁸ The corrugated strip set facing is, however, much harder to parallel and I know of only one comparable piece, a pendant in the Staatliche Kunstsammlungen in Kassel, which has been dated to the 5th to 6th century.⁸⁹ This date again may well be too early as the technique (or variants on it) are observable on both Western and Eastern objects dating from the 10th century onwards.⁹⁰ A final feature which reinforces the idea of a Middle Byzantine date for this group is the drawing striations which can be observed between the grooves of the beaded wire on no. 38, indicating that it is drawn wire.⁹¹

38. Gold and glass necklace pendant

Cyprus (?), 9th–10th century (?)
L. 46.5mm, W. 33.50mm, Wt 6.27g
Reg. no. PE 1981,5-5,1



Gold openwork pendant, almond-shaped, with a suspension loop of triple-ridged strip and a central glass bead. Twelve flattened hollow spheres are soldered between an outer border of corrugated strip set edgeways, and an inner border consisting of a running scroll of closed S-shapes. The glass bead is drilled longitudinally and threaded on a gold wire which is soldered above and twisted below. Three amorphous strips of gold are soldered on either side of the upper sphere. Beaded wire runs along the outside and the inside of the gold work.

Published: Whitfield (n. 91), fig. 13; Ogden (n. 91), fig. 3.

39. Gold and glass necklace pendant

Cyprus (?), 9th–10th century (?)
L. 45.5mm, W. 32.2mm, Wt 7.27g
Reg. no. PE 1981,5-5,2



Gold openwork pendant similar to no. 38, with the exception that the inner running scroll of closed S-shapes has been replaced by corrugated strip set facing.

Unpublished.

40. Gold and glass necklace pendant

Cyprus (?), 9th–10th century (?)
L. 48.2mm, W. 32.2mm, Wt 7.63g
Reg. no. PE 1981,5-5,3



Gold openwork pendant, a pair to no. 39.

Unpublished.

41. Gold and glass necklace pendant

Cyprus (?), 9th–10th century (?)
L. 41mm, W. 27.5mm, Wt 4.83g
Reg. no. PE 1981,5-5,4



Gold openwork pendant, almond-shaped, with a suspension loop of triple-ridged strip and two centrally threaded glass beads. Ten flattened hollow spheres are soldered between an outer border of gold strip and an inner border of corrugated strip set facing. Two glass beads, the larger one almond-shaped and opaque, the smaller spherical and green, are drilled longitudinally and threaded on a gold wire soldered above and twisted below. The upper sphere is partially masked on both sides by approximately circular strips of gold, and a similar strip covers the upper end of the wire on which the beads are threaded. Swaged wire runs around the outside and the inside of the goldwork.

Unpublished.

42. Gold and glass necklace pendant

Cyprus (?), 9th–10th century (?)
 L. 41mm, W. 26.5mm, Wt 4.34g
 Reg. no. PE 1981,5-5



Gold openwork pendant, a pair to no. 41, with the exception that the two beads have been replaced by an incomplete bead and a seed-pearl.

Unpublished.

43. Gold cylinder

Cyprus (?), 9th–10th century (?)
 L. 31mm, D. 10mm, Wt 2.35g
 Reg. no. PE 1981,5-6



Gold cylinder, the body divided into four sections each embossed with three symmetrical vegetal motifs. It is damaged in two places.

This object could have served a number of functions. Although it bears a superficial resemblance to a necklace-clasp, most Early Byzantine clasps are circular in shape, openwork in design, and with attachment loops soldered to the outer edge of the goldwork. On the other hand, gold cylinders, often hexagonal in section, were commonly used as necklace-links/spacers in the 6th and 7th centuries.⁹² Such links though are generally hollow, the chain being threaded through them, as can be seen, for instance, on three 7th-century necklaces, one from the second Cyprus treasure and now in the Metropolitan Museum of Art, New York,⁹³ one from the Mersin treasure in the Hermitage, St Petersburg,⁹⁴ and one found near Kyrenia in the Cyprus Museum.⁹⁵ The Museum's cylinder, however, is capped at either end, with no signs of an attachment loop having

ever been soldered to its ends. Perhaps loops for fastening were soldered along the body of the cylinder, and the two damaged areas, which are reasonably uniform, were created when the loops were broken. If so this cylinder may have functioned as an amulet case.⁹⁶

Unpublished.

Jewellery hoard

The seven objects described below (nos 44–50) were understood by the vendor to have been found together and the internal stylistic and technical homogeneity of the group would support this. Individual objects are related by the techniques of hollow-box construction (nos 44 and 45), of chased and embossed *opus interrasile* (nos 46 and 47), of butt-soldering (nos 44–46), by the use of triple-ridged strip (nos 44, 45 and 47), of flattened granules (nos 44 and 46) and of square-toothed wire (nos 46 and 47). In addition the gold of all these objects has a remarkably consistent colour and appearance. This group must originally have formed part of a larger hoard, as four of the objects would seem to form part of two separate necklaces. The *repoussé* leaf-shaped pendant (no. 45) would have been suspended on one side of the pendant cross (no. 44), with another missing pendant to complement it. The two *opus interrasile* pendants (nos 46 and 47) were also probably suspended from the same necklace, but whether the almond-shaped pendant was the principal/central one is uncertain as leaf-shaped pendants were normally, but not exclusively, suspended on either side of a central pendant cross.⁹⁷ In composition this hoard has some superficial similarities to several other Early Byzantine treasures, notably that from Mersin.

44. Gold cross

Byzantine, 7th century
 L. 55.8mm, W. 37.2mm, Wt 7.42g
 Reg. no. PE 1981,1-4,1

Gold cross of hollow-box construction, the stamped and chased obverse fashioned in one piece and butt-soldered to a plain gold reverse. The arms of the cross end in fleurons flanking a small medallion decorated with a whorl design, and the centre is in the form of a quadrilobe containing a cross. The suspension loop is of triple-ridged strip with a flattened stud-like granule in the angle between the loop and the obverse of the cross.

Early Byzantine pendant crosses with figural representation or foliate/geometric motifs fall into three separate but interrelated categories. Crosses of the first type have slightly flaring arms ending in medallions, sometimes framed with fleurons, containing busts of the evangelists or of St John and the Virgin, or personifications of the sun and moon and the two soldiers casting lots; in the centre is the crucified Christ or, more rarely, the Virgin.⁹⁸ The second type also has flaring arms ending in medallions, again framed with fleurons, but instead of busts, the medallions are decorated with whorls, foliate motifs or small crosses. The figure of Christ or the Virgin is replaced in the centre



by a quadrilobe or cross, or a shallow setting, in either of these forms.⁹⁹ The final type is a hybrid of the previous two having flaring arms with figural medallions of the first type, but with either a real or imitative cruciform or quadrilobe setting in the centre.¹⁰⁰ This cross, together with the leaf-shaped pendant (no. 45), would have formed part of a typical 7th-century necklace whose design was perhaps ultimately derived from a well-known sculptural motif which Talbot Rice termed a 'leaved cross',¹⁰¹ consisting of 'a cross standing erect, framed on either side by a plant or leaf motif', whose origin he traced to a slab from the church of SS Sergius and Bacchus in Constantinople, constructed between 527 and 536.¹⁰²

An almost identical example to the above cross is in a private collection in Munich.¹⁰³ Three very similar crosses, two of which were found with coins of Heraclius, are in the Dumbarton Oaks Collection: they differ, however, in that the central quadrilobe is not *repoussé*, but in the shape of a cruciform opening clearly intended to hold a gem or paste.¹⁰⁴ The same is true of two crosses found in the district of Agios Vasileios, near Rethymnon, and now in the Historical Museum, Herakleion,¹⁰⁵ and another from Kéléguiiskie Khoutora in the Ukraine.¹⁰⁶ A somewhat 'debased' version is known from Ozora-Tótipusztá in Hungary, found with coins of Constantine IV struck in 669–70.¹⁰⁷

Unpublished.

45. Gold leaf-shaped pendant

Byzantine, 7th century
L. 32.9mm, W. 17.8mm, Wt 1.70g
Reg. no. PE 1981, I-4, 2



Gold pendant of hollow-box construction in the shape of a curved leaf; the convex obverse, which is damaged, is stamped and chased with foliate designs; the suspension loop is of triple-ribbed strip, the angle between the loop and the obverse masked by a short length of the same strip. On the reverse is a roughly triangular-shaped flap of sheet.

Leaf-shaped pendants executed in *repoussé* are known from necklaces in the Metropolitan Museum of Art, New York,¹⁰⁸ and in the Dumbarton Oaks Collection.¹⁰⁹

Unpublished.

46. Gold, amethyst and pearl pendant

Byzantine, 7th century
L. 55.4mm, W. 42.2mm, Wt 7.25g
Reg. no. PE 1981, I-4, 3
Gold almond-shaped pendant executed in *opus interrasile*. Seven hollow spheres, butt-soldered from hemispheres, are soldered to a strip of gold attached by six loops to an openwork plaque, in the centre of which is an almond-shaped hole edged with square-toothed wire soldered to the plaque. An amethyst, drilled longitudinally, is threaded on a wire soldered above and



twisted below the hole. Seed-pearls, strung on wire, are threaded through the six loops. The suspension loop is of convex plain strip with a flattened stud-like granule at the angle between the loop and the front of the pendant. A similar feature covers the upper end of the wire on which the amethyst is threaded. There is also a piece of wire wrapped around the base of the suspension loop.

Pendants of this general design enjoyed great popularity in the 6th and 7th centuries:¹¹⁰ the Empress Theodora, for instance, is bedecked with a necklace with similar pendants on the San Vitale mosaics.¹¹¹ This pendant may have been worn in conjunction with the following leaf-shaped pendant (no. 47), serving either as the central pendant of a necklace, or more likely, as on a necklace from the Mersin treasure, as a subsidiary piece.¹¹²

Published: Baldini Lippolis (n. 30), no. 2.III.8.3; Yeroulanou (n. 87), no. 129, 227.

47. Gold leaf-shaped pendant

Byzantine, 7th century
L. 42.2mm, W. 19.3mm, Wt 2.10g
Reg. no. PE 1981, I-4, 4
Gold *opus interrasile* pendant in the shape of a curved leaf with embossed and chased foliate designs and outlined with square-toothed wire soldered to the face of the plaque. A slightly flattened granule is soldered to the face at the tip. The suspension loop is of triple-ribbed strip.

The best parallels for this pendant are two leaf-shaped pendants in the Cyprus Museum in Nicosia, both of which have similar chased designs and granules at the tips of their faces.¹¹³ Two necklaces in the Metropolitan



Museum, New York, and one from the Mersin treasure in the Hermitage, St Petersburg,¹¹⁴ also have pendants of a similar form.

Published: Yeroulanou (n. 87), no. 135, 228.

48. Gold bracelet

Byzantine, 7th century
57.5 x 51.2mm, Wt 13.40g
Reg. no. PE 1981, I-4, 6



Oval gold bracelet in the form of a tube tapering towards the ends, one of which has a triple-ribbed ferrule. Halfway round the thickest part of the tube, on the outside, is soldered a length of beaded wire, rubbed almost smooth.

Similar bracelets are known from Cyprus,¹¹⁵ Mersin,¹¹⁶ Constantinople¹¹⁷ and Sicily.¹¹⁸

Unpublished.

49. Gold bracelet

Byzantine, 7th century
84.7 x 63.8mm, Wt 9.20g
Reg. no. PE 1981,1-4,7



Gold bracelet, a larger, deformed example of the preceding type, with a ferrule of triple-ridged strip and, at intervals, three bands of double, triple and quadruple-ridged strip.

Unpublished

50. Gold finger-ring

Byzantine, 7th century
24.9 x 20.3 x 12mm, Wt 5.10g
Reg. no. PE 1981,1-4,5



Gold finger-ring with slender tapering hoop and a bowl bezel. The bezel is set with a convex green glass.

Unpublished.

Addendum

Shortly before this volume went to press I received a copy of Schulze-Dörrlamm's second volume of the buckles in the collection of the Römisch-Germanisches Zentralmuseum in Mainz: M. Schulze-Dörrlamm, *Byzantinische Gürtelschnallen und Gürtelbeschläge im Römisch-Germanischen Zentralmuseum. Teil 2. Die Schnallen mit Scharnierbeschlag und die Schnallen mit Angewachsenem Riemendurchzug des 7. bis 10. Jahrhunderts*, Mainz, 2009. There was no time to update in detail the buckle entries

in this paper, but I list here in abbreviated form her relevant parallels according to the catalogue numbers in my article:

2. Gold cruciform buckle: Schulze-Dörrlamm *ibid.*, Types E1-E3, 9–15, with the Museum's example published on 13, Abb. 3.
5. Gold strap end: Schulze-Dörrlamm *ibid.*, Types H3 and H4 and no. 584, 274, for similar symmetrical foliate decoration on silver and gold belt-fittings respectively from Eski Kermen in the Crimea, and Asia Minor.
8. Buckle-plate of Type 'Corinth': Schulze-Dörrlamm *ibid.*, Type E6, 19–26.
- 20–21. Buckle-plates of 'insect-like' form: Schulze-Dörrlamm *ibid.*, Type E11, 36–9.
30. Buckle: Schulze-Dörrlamm *ibid.*, Type F1, 136–9.
33. Buckle-plate: Schulze-Dörrlamm *ibid.*, Type E23, 71–7, for slight variants.
34. Buckle fragment with Christ: Schulze-Dörrlamm *ibid.*, Type E28, 89–91.
36. Buckle-plate of Type 'Bologna': Schulze-Dörrlamm *ibid.*, Type E8, 29–33.

Notes

- 1 This article was not presented as a paper at the conference. I would like to thank Christoph Eger and Noël Adams for their comments.
- 2 The bibliography on the subject of Byzantine belt-fittings is extensive. For major regional studies see, *inter alia*, for Spain: G. Ripoll López, *Toréutica de la Bética (Siglos VI y VII d.c.)*, Barcelona, 1988; Sardinia: O. von Hessen, 'Byzantinische Schnallen aus Sardinien im Museo Archeologico zu Turin', in G. Kossack and G. Ulbert (eds), *Studien zur vor- und frühgeschichtlichen Archäologie. Festschrift für Joachim Werner II*, Munich, 1974, 545–57; Italy: E. Riemer, *Romanische Grabfunde des 5.-8. Jahrhunderts in Italien*, Rahden/Westf., 2000; south-east Europe: V. Varsik, 'Byzantinische Gürtelschnallen im mittleren und unteren Donauraum im 6. und 7. Jahrhundert', *Slovenská Archeológia* 40/1 (1992), 77–106; Hungary: E. Garam, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts*, Budapest, 2001; Romania: D. Gh. Teodor, 'Pieșe vestimentare bizantine din secolele VI–VIII în spațiul carpato-dunăreano-pontic', *Arheologia Moldovei* 14 (1991), 117–38; North Africa: Ch. Eger, 'Boucles de ceinture de la région de Carthage datant des VIe et VIIe siècles', *Centre d'Études et de Documentation Archéologique de la Conservation de Carthage* 19 (1999), 12–15; Israel: *idem*, 'Gürtelschnallen des 6. bis 8. Jahrhunderts aus der Sammlung des Studium Biblicum Franciscanum', *Liber Annuus* 51 (2001) (2003), 337–50; Jordan: *idem*, 'Dress Accessories of Late Antiquity in Jordan', *Levant* 35 (2003), 163–78; Turkey: M. Lightfoot, 'Belt Buckles from Amorium and in the Afyon Archaeological Museum', in C. S. Lightfoot (ed.), *Amorium Reports II: Research Papers and Technical Reports* (BAR International Series 1170), Oxford, 2003, 81–103; Crimea (Ukraine): A. I. Aïbabin, 'Chronologiya mogil'nikov Krima pozdnerimskogo i

- rannesrednevekovogo vremeni', *Materialy po arheologii, istorii i etnografii Tavrii* 1, Simferopol, 1990, 4–86. Essential also is: M. Schulze-Dörrlamm, *Byzantinische Gürtelschnallen und Gürtelbeschläge im Römisch-Germanischen Zentralmuseum. Teil 1. Die Schnallen ohne Beschlag, mit Laschenbeschlag und mit Festem Beschlag des 5. bis 7. Jahrhunderts* (Kataloge vor- und frühgeschichtlicher Altertümer Band 30), Mainz, 2002.
- 3 Schulze-Dörrlamm (n. 2), 184–6; cf. no. 11 below.
- 4 Inv. no. AM 1909, 828.
- 5 M. C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection, Vol. 2: Jewelry, Enamels, and Art of the Migration Period*, Washington DC, 1965, no. 2C, 4–6, pl. VII.
- 6 A. Garside (ed.), *Jewelry: Ancient to Modern*, Walters Art Gallery, Baltimore, 1979, no. 431, 153.
- 7 E. Georgoula (ed.), *Greek Jewellery from the Benaki Museum Collections*, Athens, 1999, no. 123, 329.
- 8 Ross (n. 5), no. 4F, 7–8, pl. X.
- 9 Garside (n. 6), no. 431, 153.
- 10 J. Werner, 'Eine goldene byzantinische Gürtelschnalle in der Prähistorischen Staatssammlung München', *Bayerische Vorgeschichtsblätter* 53 (1988), 301–08.
- 11 R. Cormack and M. Vassilaki (eds), *Byzantium 330–1453*, London, 2008, no. 111, 159 and 407.
- 12 A. K. Orlandos, 'Époque byzantine et post-byzantine', in P. Amandry (ed.), *Collection Hélène Stathatos. III. Objets antiques et byzantins*, Strasbourg, 1963, no. 200, 281, pl. XLI.
- 13 Schulze-Dörrlamm (n. 2), Types D22–D26, 193–207, for some examples. See also, D. Papanikola-Bakirtzi (ed.), *Everyday Life in Byzantium* (exh. cat., White Tower, Thessaloniki), Thessaloniki, 2002, no. 823.
- 14 Ross (n. 5), no. 4F, 7–8, pl. X.
- 15 *Ibid.*, no. 6H, 11, pl. XIV. The rosette bosses which decorate the plate are also reminiscent of another 7th-century buckle type, Werner's Type 'Riva San Vitale' (J. Werner, 'Byzantinische Gürtelschnalle aus Riva San Vitale', *Sibirium* 3 (1957), 79), which Eger dates from the mid-7th to the early 8th century: see Eger, this volume, in particular Pls 9 and 11.
- 16 A. Banck, *Byzantine Art in the Collections of the USSR, Leningrad/Moscow*, 1966, pl. 105. Cf. also L. Wamser (ed.), *Die Welt von Byzanz – Europas Östliches Erbe – Glanz, Krisen und Fortleben einer tausendjährigen Kultur*, Munich, 2004, nos 478, 480, 481, for shield-shaped mounts with 'dot and comma' ornament.
- 17 J. András, 'A gold belt-end from the Ashmolean Museum, Oxford', in F. Daim (ed.), *Die Awaren am Rand der byzantinischen Welt: Studien zu Diplomatie, Handel und Technologietransfer im Frühmittelalter*, Innsbruck, 2000, 67–76, at 75, fig. 11.
- 18 Garam (n. 2), pls 87 and 99.
- 19 M. S. Arena et al. (eds), *Roma dall'Antichità al Medioevo. Archeologia e Storia nel Museo Nazionale Romano Crypta Balbi*, Milan, 2001, II.4.650, 382–3.
- 20 Aïbabin (n. 2), pl. 43:3–19.

- 21 Ross (n. 5), no. 42A, 41–2, pl. XXXIV.
- 22 A. Pasqui, 'Necropoli barbarica di Nocera Umbra', *Monumenti Antichi* 25 (1918), 137–352, at 310, fig. 165.
- 23 Garam (n. 2), pl. 85.
- 24 L.K. Pekarskaja and D. Kidd, *Der Silberschatz von Martynovka (Ukraine) aus dem 6. und 7. Jahrhundert*, Innsbruck, 1994, pls 5, 31, 57 and 159–60, pls 1 and 2.
- 25 J. Werner, 'Byzantinische Gürtelschnallen des 6. und 7. Jahrhunderts aus dem Sammlung Diergardt', *Kölner Jahrbuch für Vor- und Frühgeschichte* 1 (1955), 36–48, pl. 4:5, 6, 7.
- 26 E. Garam, 'Über die Beziehung der byzantinischen Goldschnallen und der awarenzeitlichen Pseudoschnallen', in Cs. Bálint (ed.), *Kontakte zwischen Iran, Byzanz und der Steppe im 6.–7. Jahrhundert*, Budapest/Naples/Rome, 2000, 222, fig. 3.1–3.
- 27 Werner (n. 25), pl. 4:5–7.
- 28 Ross (n. 5), no. 6H, 11, pl. XIV.
- 29 Werner (n. 25), 47–8; D. Csallány, 'Les monuments de l'industrie byzantine des métaux I', *Acta Antiqua Academiae Scientiarum Hungaricae* 2 (1954), 325 and 346–7, pl. VI.1–7; Csallány assigns an almost identical example to the British Museum's to Group 8: *ibid.*, 327 and 347, pl. VII.3. For a distribution map of this type see: E. Riemer, 'Byzantinische Gürtelschnallen aus der Sammlung Diergardt im Römisch-Germanischen Museum Köln', *Kölner Jahrbuch* 28 (1995), 777–809, at 804–07, fig. 32.
- 30 Ripoll López (n. 2), no. 120, 346, fig. 34.
- 31 Von Hessen (n. 2), pl. 3; Baldini Lippolis (n. 30), nos 4e.11–14, 232.
- 32 Riemer (n. 2), pls. 96.13, 97.3 and 101.8.
- 33 Werner (n. 25), 47; Papanikola-Bakirtzi (n. 13), no. 480, for six examples found in a tomb in the basilica at Tigani, and no. 481 for a further two examples.
- 34 *Ibid.*, 48.
- 35 *Ibid.*, 48.
- 36 Garam (n. 2), pl. 62.1, 313.
- 37 N. Profantová, 'The Middle Avar period and the problem of a "cultural change"', *Antæus* 29–30 (2008), 215–32, at 223, fig. 8.5.
- 38 Werner (n. 25), 47, pl. 8:13 and 15; I. Gavrituchin, 'Archaeological heritage of the Avar Khaganate', *Antæus* 29–30 (2008), 63–125, at 117, fig. 20: 48 and 54.
- 39 Lightfoot (n. 2), no. 15, 86.
- 40 I. Mikulčić, *Spätantike und frühbyzantinische Befestigungen in Nordmakedonien*, Munich, 2002, pl. 47.9 (from Čučer).
- 41 See Schulze-Dörrlamm (n. 2), 152–5, for references and a distribution map of the type.
- 42 *Ibid.*, 161–3.
- 43 *Ibid.*, 184–6.
- 44 Riemer (n. 2), pl. 96.11.
- 45 In the British Museum. See Ager, this volume, Pl. 17.
- 46 Schulze-Dörrlamm (n. 2), 185.
- 47 G.F. Bass and F.H. van Doorninck, Jr., *Yassi Ada: A Seventh-Century Byzantine Shipwreck*, I, College Station, 1982, MF20, 277, fig. 12–7.
- 48 Lightfoot (n. 2), nos 12 and 14, 86.
- 49 Garam (n. 2), 93, pl. 59.5.
- 50 *Ibid.*, 193–9, esp. nos 173–7, and fig. 71 for a map of the type's distribution. See also: U. Jantzen, *Die Wasserleitung des Eupalinos: Die Funde* (Samos Band XX), Bonn, 2004, nos 731–2, 120–1, pl. 19; A.H.S. Megaw, *Kourion: Excavations in the Episcopal Precinct*, Washington DC, 2007, no. 9, 529, fig. 17.1.
- 51 P. Orsi, 'Bizantina Siciliae. VII: I fermagli di cintura', *BZ* 21 (1912), 197–204, at 201, fig. 17. See also, Wamser (n. 16), no. 459, 281.
- 52 G.R. Davidson, *Corinth. Volume 12: The Minor Objects*, Princeton, 1952, no. 2220, 273, pl. 115.
- 53 Ripoll López (n. 2), no. 123, 188, 347–8, fig. 34, pl. 41.
- 54 Baldini Lippolis (n. 30), no. 4.h, 233; Riemer (n. 2), pl. 97.11.
- 55 Orsi (n. 51), 204, fig. 25; P. Orsi, 'Gli Scavi intorno a L'Athenaion di Siricusa negli anni 1912–1917', *Monumenti Antichi* 25 (1918), 583, fig. 172.
- 56 Orsi (n. 51), 200–01, fig. 16; Wamser (n. 16), no. 455, 281.
- 57 Baldini Lippolis (n. 30), no. 4c.20, 229 (from Mattinata, Puglia).
- 58 See C. Katsougiannopoulou, 'Einige Überlegungen zum byzantinischen Friedhof in Tigani auf den Peloponnes', in U. Pohl, U. Recker and C. Theune (eds), *Archäologisches Zellwerk. Beiträge zur Kulturgeschichte in Europa und Asien. Festschrift für Helmut Roth zum 60. Geburtstag*, Rahden/Westf., 2001, 461–5, Abb. 4, for an example from Tigani in the southern Peloponnese.
- 59 Orsi (n. 51), 200, fig. 14 (from Pantalica); H. Dannheimer, *Byzantinische Grabfunde aus Sizilien*, Munich, 1989, no. 24, 38, pl. 2 (from Centuripe) and no. 53, 44, pl. 3 (from Mussomeli); Riemer (n. 2), 438, pl. 96.8 (from San Mauro Sotto).
- 60 P. Arthur, 'Fibbie e fibule di età altomedievale dal Salento', *Studi di Antichità* 9 (1996), 431–8.
- 61 Riemer (n. 2), 437, pl. 93.3, 438, pl. 96.9 and 450, pl. 116.2; see also, Orsi (n. 51), 200, fig. 13.
- 62 C. Stiegemann (ed.), *Byzanz – Das Licht aus dem Osten: Kult und Alltag im Byzantinischen Reich vom 4. bis 15. Jahrhundert*, Paderborn, 2001, no. IV.95, 343–4.
- 63 Riemer (n. 2), 464, pl. 103.9–10.
- 64 See Eger, this volume.
- 65 Wamser (n. 16), no. 449, 281. See also E. Dauterman Maguire, H.P. Maguire and M.J. Duncan-Flowers, *Art and Holy Powers in the Early Christian House*, Urbana and Chicago, 1989, no. 100, 175, for a related example with a box monogram resolving as 'of Paul'.
- 66 See W. Wroth, *Catalogue of the Coins of the Vandals, Ostrogoths and Lombards... in the British Museum*, London, 1911, 326–7, for the monogram types, the closest being that of Gelimer (530–33).
- 67 E.M. Ruprechtsberger, *Syrien: von den Aposteln zu den Kalifen*, Linz, 1993, no. 22, 405; for two very similar unprovenanced examples, see: Frank Sternberg, *Antike Münzen. Griechen – Römer – Byzantiner... Auktion XXII... den 20. November 1989 und... den ...21 November 1989 im Hotel Bellerive au Lac, Zürich*, Zurich, 1989, nos 742 and 743A, pl. 35.
- 68 Eger 2003 (n. 2), 173 and 176, fig. 4.2, who considers this to be a Levantine variant of the 'Corinth' type. The pierced projections resembling birds' heads are reminiscent of the buckle Type 'Pápa', although the plates are of a completely different form: S. Uenze, 'Die Schnallen mit Riemenschlaupe aus dem 6. und 7. Jahrh.', *Bayerische Vorgeschichtsblätter* 31 (1966), 142–81, at 149–52, Abb. 5.
- 69 Ripoll López (n. 2), no. 25, 286–7, pl. 8; Schulze-Dörrlamm (n. 2), 233, pl. 87.
- 70 See also another variant where the bust of Christ has been substituted with Samson wrestling the lion, and the two heads with confronted birds: J.F. Westenholz, *Images of Inspiration, The Old Testament in Early Christian Art*, Bible Lands Museum Jerusalem, 2000, no. 49, 79.
- 71 Cormack and Vassilaki (n. 11), no. 111, 159 and 407.
- 72 Garam (n. 2), 90, pl. 54.5 and pl. 105.5.
- 73 Garside (n. 6), no. 433, 154.
- 74 Stiegemann (n. 62), no. IV.91, 341–2; Wamser (n. 16), no. 442, 279.
- 75 Eger 2002 (n. 2), no. 8, 344–5, fig. 2.3.
- 76 Garam (n. 2), 90, pl. 54.2.
- 77 Werner (n. 25), 47–8, pl. 5.3.
- 78 Aibabin (n. 2), pl. 42: 10, 13.
- 79 Gavrituchin (n. 38), fig. 20.15.
- 80 Eger 2001 (n. 2), no. 7, 342–4, pl. 2.2.
- 81 Eger 1999 (n. 2), 12, pl. 4.5.
- 82 Davidson (n. 52), no. 2191, pl. 114 for a slight variant.
- 83 Riemer (n. 2), 448, pl. 101.9 (from Chiaramonte Gulfi).
- 84 Baldini Lippolis (n. 30), no. 4.i.2, 233 (from S. Maria Vittoria, Serri).
- 85 *Ibid.*, no. 4.i.3, 233 (from Tomb G2, basilica of S. Tommaso, Cimitile); Arena *et al.* (n. 19), no. II.4.591, 374–5 (from Rome).
- 86 See for instance the pendants worn by the Empress Theodora on the San Vitale mosaics, as illustrated by Stolz, this volume, Pl. 2.
- 87 For earlier examples of the strip set edgeways, see for instance the openwork hoops of a ring in the Benaki Museum (B. Segall, *Katalog der Goldschmiede-Arbeiten: Museum Benaki, Athens*, Athens, 1938, no. 256, 162, pl. 50), and one in the Dumbarton Oaks Collection (Ross [n. 5], no. 72, 61, pl. 45), and an earring in the Kanellopoulos Museum, Athens (Baldini Lippolis (n. 30), no. 4f7, 97. For the scroll of closed S-shapes, see a number of gold earrings in the British Museum (O.M. Dalton, *Catalogue of the Early Christian Antiquities and Objects from the Christian East in the Department of British and Medieval Antiquities and Ethnography of the British Museum*, London, 1901, nos 268–70, 44, pl. V) and in the Benaki Museum (Segall *ibid.*, nos 245–6, 156–7, pl. 49); also, A. Yeroulanou, *Diatreta. Gold pierced-work jewellery from the 3rd to the 7th century*, Athens, 1999, no. 464, 278. Also noteworthy are a group of copper-alloy earrings composed of openwork filigree wire in the form of crosses and scrolls which have traditionally been ascribed to Egypt (see Papanikola-Bakirtzi [n. 13], no. 554 (with bibliography) for two pairs in the Benaki Museum, Athens). As with the gold filigree examples they are normally dated to the 6th and 7th centuries. I am not aware, however, of the existence of any

- reliable archaeological evidence to justify this dating and it may well be that both groups are later than supposed.
- 88 For later Western examples as, for instance, exemplified by three Ottonian brooches in the British Museum's collection - the Towneley brooch, the Dowgate Hill brooch, and a brooch set with a Roman cameo from the Franks Bequest - see: J. Ogden, 'The Technology of Medieval Jewellery', in D.A. Scott, J. Podany and B.B. Conside (eds), *Ancient & Historic Metals. Conservation and Scientific Research*, Getty Conservation Institute Malibu, 1994, 153-82, at 168-71, figs 9, 12, 17. I am grateful to Jack Ogden for this reference. For jewellery in the East, see in particular the so-called basket earrings of the 11th or 12th centuries, both Byzantine and Islamic: A. Gonosová and C. Kondoleon, *Art of Late Rome and Byzantium in the Virginia Museum of Fine Arts*, Richmond, 1994, nos 28 and 30; Papanikola-Bakirtzi (n. 13), no. 558; H.C. Evans and W.D. Wixom (eds), *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era AD 843 - 1261*, New York, 1997, no. 274, where an Islamic origin for these earrings is argued.
- 89 F. Naumann, *Antiker Schmuck* (Katalog der Sammlung und der Sonderausstellung vom 31.5 bis 31.8. 1980), Melsungen, 1980, no. 29, 29, pl. 8. A not dissimilar piece is an earring from Kyrenia in the Cyprus Museum in Nicosia, which appears to have corrugated strip set facing, but which is in reality beaded wire (A. Pierides, *Jewellery in the Cyprus Museum*, Nicosia, 1971, pl. XXXVII, no. 3, 29).
- 90 For a brief discussion of corrugated or undulating strip in a historical context, see: Ogden (n. 88), 168-71.
- 91 N. Whitfield, 'Round Wire in the Early Middle Ages', *Jewellery Studies* 4 (1990), 13-28, at 24, fig. 13; J.M. Ogden, 'Classical Gold Wire', *Jewellery Studies* 5 (1991), 95-105, fig. 3. The origins of drawn wire are still uncertain, although Ogden (n. 88), has recently remarked: 'on the basis of our current knowledge, it is possible to conclude that gold wiredrawing probably first appeared in the Western world in about the seventh or eighth century CE'. It was certainly widespread in northern Europe by around 800 (cf. Whitfield, *ibid.*, 24-6). The gold earring in the British Museum illustrated by Oddy (A. Oddy, 'Gold wire in Antiquity', *Aurum* 5 (1981), 8-12, fig. 10), and sometimes stated to be an early example of 7th-century Byzantine drawn wire, is in fact a much later Middle Byzantine type.
- 92 Links of this form have a long tradition going back to at least the 3rd century.
- 93 A. and J. Stylianou, *The Treasures of Lambousa*, Nicosia, 1969, 52, fig. 40.
- 94 Banck (n. 16), no. 104, 348, fig. 104.
- 95 J.L. Myers, 'Byzantine Jewellery in Cyprus', *The Reliquary and Illustrated Archaeologist*, New Series, Vol. IV (1898), 109-12, fig. 1.
- 96 For a necklace in the Dumbarton Oaks Collection with two pendant amulet cases flanking a cross, see: Ross (n. 5), no. 6B, 10, pl. XII; for three 7th-century examples from the Mytilene treasure, see: Baldini Lippolis (n. 30), no. 2.III.9b.2-3, 146-7, fig. 14.
- 97 For three variants, see a necklace in the Dumbarton Oaks Collection which has two leaf-shaped pendants flanking a rectangular pendant stamped with a cross (Ross [n. 5], no. 6A, 10, pl. XIII), a necklace in the Metropolitan Museum, New York, which has two leaf-shaped pendants in the centre with a circular pendant on either side of them (H. Pierce and R. Tyler, *L'art byzantin*, II, Paris, 1934, 131, pl. 189C), and a necklace from the Mersin treasure with a cross flanked by one circular and one leaf-shaped pendant (V. Zaleskaya, *Monuments of Byzantine Applied Arts 4th - 7th Centuries. Catalogue of the Hermitage Collection*, St Petersburg, 2006, no. 137, 99-100 (in Russian)).
- 98 For some examples of this type (with Christ in the centre) see: A. Riegl, *Die spätromische Kunst-Industrie nach den Funden in Österreich-Ungarn*, II, Vienna, 1923, 39, pl. XIV; J. Werner, 'Zwei byzantinische Pektoralkreuze aus Aegypten', *Seminarium Kondakovianum* 8 (1936), 183ff., pl. V; A.B. Tonnochy, 'A Byzantine Pectoral Cross', *British Museum Quarterly* 15 (1941-50), 76; Ross (n. 5), no. 15, 21-2, pl. XXIII; Baldini Lippolis (n. 30), no. 2.III.10a.12, 148; J. Price, *Masterpieces of Ancient Jewellery*, Philadelphia/London, 2008, 94; with the Virgin in the centre: Dalton (n. 87), no. 287; G. Cavallo *et al.* (eds), *IBizantini in Italia*, Milan, 1982, no. 301, 352.
- 99 For this type see, *inter alia*: M. Chatzidakis (ed.), *Byzantine Art, an European Art, the 9th Exhibition of the Council of Europe*, Athens, 1964, nos 412-13, 373; Ross (n. 5), nos 6C and 6D, 10, pl. XII; Zaleskaya (n. 97), no. 137, 99-100; K. Weitzmann, *Age of Spirituality. Late Antique and Early Christian Art, third to seventh century* (exh. cat., Metropolitan Museum of Art, New York), New York, 1979, 298, fig. 36, and no. 285, 311. For an example from Kerch, where the central setting has been inlaid with garnets, see: O.M. Dalton, 'A gold pectoral cross and an amuletic bracelet of the sixth century', in *Mélanges offerts à Gustav Schlumberger*, Paris, 1924, 386-90, pl. XVII.
- 100 For this type, see: *Collection Hélène Stathatos: les objets byzantins et post byzantins*, Limoges, 1957, no. 44, 59, pl. V; Pierides (n. 89), 56, pl. XXXIX; Ross (n. 5), no. 6B, 10, pl. XII.
- 101 D. Talbot Rice, 'The leaved cross', *Byzantinoslavica XI* (1950), 72-81. A typical example of this type of necklace is in the Metropolitan Museum of Art, New York, on which Brown commented: 'the leaf pendants are similar in shape to the Cyprus tree that often flank the cross in Byzantine representations, where they are symbolic of the trees in the Garden of Eden that brought death and the tree of Golgotha which brings life': Weitzmann (n. 99), 311.
- 102 C. Mango, 'The Church of Saints Sergius and Bacchus at Constantinople and the alleged tradition of octagonal Palatine churches', *Jahrbuch der Österreichischen Byzantinistik* 21 (1971), 189-93.
- 103 Wamser (n. 16), no. 512, 310. See also, A.I. Aïbabin, 'Pogrebenija konza VII-pervoj poloviny VIII v. v Krymu', in A.K. Ambroz and I.F. Erdélyi (eds), *Drevnosti epokhi velikogo pereselenia narodov V - VIII vekov*, Moscow, 1982, 165-92, at 185, fig. 10.10 for what appears to be a very similar example from catacomb 257 at Eski-Kermen.
- 104 Ross (n. 5), nos 6B, 6C, 6D, pl. XII.
- 105 Chatzidakis (n. 99), no. 414, fig. 412; Baldini Lippolis (n. 30), no. 2.III.10a:6-7.
- 106 Baldini Lippolis (n. 30), no. 2.III.10a.8, 148.
- 107 Garam (n. 2), pl. 39.2.
- 108 For an excellent photograph see: Yeroulanou (n. 87), 37.
- 109 Ross (n. 5), nos 6A and 11, 10, 16-17, pls XIII and XVIII. For similar single pendants, see: Price (n. 98), 96; Aïbabin (n. 103), fig. 10.15.
- 110 See for instance: *Collection Stathatos* (n. 100), no. 203A, 284, pl. XLII; Chatzidakis (n. 99), no. 411, 373; Yeroulanou (n. 87), no. 130, 227. The combination of a centrally-threaded stone (amethysts, pearls or sapphires) and borders of pearls or seed-pearls, is best paralleled on almond-shaped earrings: Ross (n. 5), no. 89, 68-9, pl. XLVII; Stylianou (n. 93), 58, fig. 44; Pierides (n. 89), pl. XXXVII, 2 and 3.
- 111 See **Stolz in this volume, Pl. 2.**
- 112 Zaleskaya (n. 97).
- 113 Myers (n. 95), 109, fig. 1.
- 114 Stylianou (n. 93), figs 40 and 41; Zaleskaya (n. 97), no. 104, 348, fig. 104.
- 115 Pierides (n. 89), 58, pl. XXXIX.
- 116 Banck (n. 16), no. 102.
- 117 Ross (n. 5), no. 4C, 7, pl. IX, and no. 179G, 136, pl. XCVI.
- 118 P. Orsi, *Sicilia bizantina*, I, Rome, 1942, pl. 10, no. 1; Baldini Lippolis (n. 30), no. 2.VI.14-16, 182.

The Evidence for Jewellery Production in Constantinople in the Early Byzantine Period

Yvonne Stolz

Introduction

In the jewellery catalogue of the Benaki Museum in Athens, Bertha Segall stated: 'Die Mode scheint damals international gewesen zu sein'.¹ With this statement, Segall puts into plain words what others had only hinted at before, that techniques, shapes, motifs, and styles were popular all over the Byzantine Empire and beyond its borders.² As the term 'international' is ambiguous in this context, this phenomenon would better be called 'interregional'. Among 'interregional' types is, for instance, the crescent-shaped pierced-work earring, which was one of the most popular forms found in Early Byzantine jewellery. Such earrings have been found, for example, in Mersin in Cilicia, Polis in Cyprus, Syria, Keszthely-Fenékpuszta in Hungary, and at Menouthis in Abuqir Bay, Egypt.³ As explanation for the wide geographical distribution of crescent-shaped pierced-work earrings and other pieces of jewellery, it has been suggested by many scholars that all jewellery with 'interregional' features was made exclusively in the capital of the Byzantine Empire, Constantinople, probably in a state workshop, and distributed from there.⁴ However, this seems unlikely, since some of the pieces of jewellery found in the recent excavations in Abuqir Bay in Egypt show that provincial centres also were able to produce jewellery of a high quality in the 'interregional' fashion (Pls 1 and 4).⁵ Thus, not everything that is of a high quality, or follows the 'interregional' style, seems to come from the capital. The 'interregional' fashion may, therefore, rather be due to the influence of one leading workshop, whose techniques, shapes, motifs, and styles were copied elsewhere. The workshop in question could indeed have been situated in Constantinople. Constantinople became the imperial capital after Rome under Constantine the Great, and it may likewise have taken over the former capital's role as a jewellery trendsetter.⁶ But what is Constantinopolitan and what is not? In order to answer this question it is first necessary to examine and discuss the previous scholarly research.

The state of research

A large number of pieces of Early Byzantine jewellery have alleged Constantinopolitan provenances, most of which are probably based on the statements of dealers and are, therefore, not wholly reliable. Some pieces of Early Byzantine gold jewellery may indeed have been scientifically excavated or found in the capital, but, to my knowledge and in contrast to base metal jewellery,⁷ none has been published yet. However, various attempts have been made to attribute jewellery to Constantinople. One approach, accepted by various scholars, is to attribute jewellery to Constantinople on the grounds of its high quality.⁸ Attributing jewellery by its quality may succeed in some cases, but fail in others, since, as stated, provincial workshops were able to produce jewellery of the same high quality as one might perhaps expect from Constantinople.



Plate 1 Gold marriage ring from Abuqir Bay, Egypt

In addition, several pieces of jewellery that are decorated with imperial motifs or inscriptions have been attributed to Constantinople, among them a pendant with two embossed gold discs that resemble an imperial medallion, recently published by Rosenbaum-Alföldi.⁹ As I have argued in a recent publication,¹⁰ Rosenbaum-Alföldi's localisation of the pendant to Constantinople cannot be justified as she has misunderstood its inscription, and the pendant may well have been made elsewhere, possibly in Egypt where it was allegedly found. It must also be noted that jewellery with medallions or coins does not necessarily originate from Constantinople. Although medallions and coins were bestowed on high officials and army members by the imperial family as known from literary sources, not all were struck in Constantinople,¹¹ and, as Boyd has convincingly pointed out, it often remains unclear whether medallions and coins were set into the jewellery directly after being struck or some decades later, possibly at another place.¹² This is, for example, the case for a medallion of Theodosius (379–95) from the Assiût hoard, which was reused in the late 6th or early 7th century when it was inserted into a pendant that was made to be suspended from a torc with late 6th-century coins.¹³ Furthermore, many pieces of jewellery with inserted medallions and coins have alleged Egyptian findspots, and certain motifs in their decoration seem to point to Egyptian workmanship, as is the case, for example, of the coin-set jewellery from the Assiût hoard and for a pair of bracelets allegedly from the Fayoum or Behnesa.¹⁴ Moreover, and in contrast to medallions in general, because jewellery was set with coins this does not necessarily imply that coin-set jewellery was made in Constantinople or that its owner was a member of the imperial family as coins were also considered to have had amuletic powers;¹⁵ coins may appear on jewellery for this reason alone. Furthermore, as observed by Deppert-

Lippitz, even pieces of jewellery with imperial inscriptions that name certain emperors, such as a number of inscribed crossbow *fibulae* in various materials, may have been made in provincial centres.¹⁶

Another attempt to localise jewellery production to Constantinople has been made by Arrhenius, who argues that jewellery with ‘cement cloisonné’, by which she means garnet inlays that were embedded by adhesive materials with a high gypsum content, was made in the capital.¹⁷ It may indeed be possible to attribute certain pieces of jewellery to the same workshop with the help of scientific methods, but, as has been convincingly argued by Foltz in a review of Arrhenius’ study, adhesive materials can change their composition when buried in the earth.¹⁸ In addition, most pieces of jewellery with ‘cement cloisonné’ listed by Arrhenius were found outside the Byzantine Empire.¹⁹

Based on a study of the imperial mosaics in San Vitale in Ravenna, Brown has assigned some extant pieces of jewellery to Constantinople, for example a necklace with wire links and beads from the Lambousa hoard.²⁰ This necklace, though, was probably made in Cyprus, as indicated by the depiction of single birds on its pierced-work closure discs – a feature found on many necklaces from or allegedly from Cyprus.²¹ Other pieces similar to those on the Ravenna mosaics may well come from Constantinople, but this would require further research.

As most previous attempts to attribute specific pieces of jewellery to Constantinople have failed, this matter has to be approached anew by a more systematic study of the literary sources, contemporary representations, and extant pieces of gold jewellery. As will be shown below, jewellery production in Constantinople can be divided into the production of insignia for the military and for officials in state workshops, the production of insignia and jewellery for the imperial family in a court workshop, and, finally, the production of jewellery for the general public in independent workshops. The subsequent sections follow this division. First the literary sources will be discussed alone, then the images and the extant pieces of jewellery side by side.

Literary sources

In the Early Byzantine period, three independent departments (*comites*) were responsible to the emperor, and each had its own treasury: the praetorian prefect, the *sacrae largitiones*, and the *res privatae*. The *sacrae largitiones* had existed from the 3rd century and were in charge of tax collection, the payment of troops, of the imperial mints, mines, and, most importantly, the state factories in precious metals.²² It was divided into *scrinia* (sub-departments), two of which were concerned with gold: the *scrinium aureae massae* (‘the recipient of the tested gold bars’),²³ and the *scrinium auri ad responsum*, which ‘perhaps dealt with returns of gold stocks in the diocesan depots’.²⁴ A law of 384, which found its way into the *Codex Iustinianus*,²⁵ lists the technical staff working for the *comes sacrarum largitionem*: there are, among others, *aurifices solidorum* (minters of *solidi*), *aurifices specierum* (goldsmiths), *sculptores et ceteri artifices* (engravers and other craftsmen), *argentarii comitatenses* (silversmiths), and *barbaricarii* (craftsmen for parade arms and armour). As suggested by Kent, the latter may also have been responsible for the production of *fibulae*.²⁶ The main office of the *comes sacrarum largitionem*

was situated in Constantinople, but according to Jones it may also have had a large number of staff and material depots (*thesauri*) in the provinces.²⁷ This is corroborated by numismatists, who, though they maintain that the *aurifices solidorum* were mainly active in the imperial mint in Constantinople, have suggested that there is also evidence for the minting of gold coins elsewhere at specific times.²⁸ In addition, some silver vessels bear imperial control stamps with portraits of the Byzantine Emperors Justinian (from 541) and Phokas (602–10), which can possibly be attributed to imperial mints in Carthage and Antioch-on-the-Orontes.²⁹ These silver vessels may thus have been produced in the regional *scrinia argenti*. Furthermore, workshops of the *barbaricarii* are known to have operated not only in 4th-century Constantinople but also in Antioch.³⁰ The production of state-controlled precious metal goods was thus not limited to the capital. However, it has been suggested by Grierson that gold coins were only struck ‘when and where the emperor was in residence’.³¹ Until Heraklios (610–41), emperors rarely left Constantinople after the reign of Arkadios (395–408), so most gold coins were probably minted there.³² The same could hold true for the production of other state-controlled gold goods.

The literary sources provide no satisfactory evidence about the range of products manufactured by the *aurifices specierum*. It is known, however, that the *comites* provided insignia for high officials and the military elite, among them most prominently buckles, *fibulae* and torcs, but probably also rings bearing the emperor’s image and bracelets.³³ As mentioned above, the *barbaricarii* may have been responsible for the production of *fibulae*, and it is thus tempting to assume that they were also responsible for the production of other military insignia. If this was the case, the *aurifices specierum* could only have been in charge of insignia and jewellery for the imperial family. As indicated by *Codex Iustinianus* 11:12, which was first formulated during the reign of Leo I (457–74), imperial insignia had to be made by *palatinis artificibus* or palace workmen. The *aurifices specierum* probably belonged to the *palatinis artificibus* and thus to the court workshop. It is also possible that they and not the *barbaricarii* produced military insignia other than *fibulae*.

In addition to the information that can be gained from the literary sources on the state workshops, *Codex Iustinianus* 11:12 also provides some information on imperial jewellery: it regulates the combined use of emeralds, hyacinths (probably sapphires),³⁴ and pearls.³⁵ These materials may, therefore, have been an imperial prerogative. This is corroborated by a poem written by Claudianus, who describes the garments of the Emperor Honorius (395–423) as bedecked with emeralds, amethysts, and hyacinths, and by images that show imperial garments with stones in these colours.³⁶ According to the *Codex Iustinianus* (11:12), these materials had to be removed from bridles, saddles, and belts while other stones and decorative techniques remained officially approved. In addition, no one was allowed to wear and decorate *fibulae* and *curcumii*³⁷ with any stones. Violating these laws resulted in a fine of 50 pounds of gold. Furthermore, no person was authorised to produce jewellery that was reserved for the imperial robe and cult, with the exception of finger-rings for both sexes and women’s jewellery;³⁸ it was also forbidden to produce jewellery in order to present it to the imperial family. Violation of this decree

resulted in a fine of 100 pounds of gold and the death penalty.³⁹ Finally, as previously mentioned, *Codex Iustinianus* 11:12 legislates that jewellery for the imperial family had to be produced by *palatinis artificibus* or palace workmen, and not in private houses or other workshops.

Constantinople, as the capital of the Byzantine Empire, probably boasted a large quantity of smaller, independent gold workshops and perhaps a goldsmith's guild such as that known to have been operating in Alexandria. However, there is no evidence for privately run gold workshops in Constantinople in the literary sources, and a Constantinopolitan goldsmith's guild is only mentioned later by the early 10th-century *Book of the Prefect*.⁴⁰ *Codex Iustinianus* 11:12 indicates that goldsmiths also worked in private houses. This could also have been the case for Early Byzantine Constantinople, as the *Book of the Prefect* later prohibits Constantinopolitan goldsmiths from working in private houses; they became bound to workshops on the Mese, Constantinople's main street.⁴¹ Thus, and since private copper-, silver-, and blacksmiths had workshops on or close to the Mese in the Early Byzantine period,⁴² one could draw the conclusion that privately run gold workshops were located, although maybe not exclusively, in the same area in the Early Byzantine period.

Contemporary images and extant pieces of jewellery

Insignia for high officials or the military, as produced by the *barbaricarii* and/or the *aurifices specierum*, are depicted in several images: for instance, belt buckles and crossbow *fibulae* are shown among other insignia in the miniatures of the *Notitia Dignitatum*.⁴³ Crossbow *fibulae* are also shown on the mosaic panels in San Vitale in Ravenna. As mentioned above, the jewellery on these panels was attributed to the state workshop by Brown.⁴⁴ In Ravenna, crossbow *fibulae* are worn by some of the officials that accompany the Emperor Justinian (527–65) and his wife Theodora. Justinian's bodyguards on the same mosaic also wear torcs which have relatively large center-pieces, possibly with stone inlays. A torc, probably decorated with coins, worn by a military saint on a bowl from the Lambousa hoard is comparable.⁴⁵ Other depictions of torcs, for example on medallions and ivory panels, have been discussed by Dalton and Delbrück.⁴⁶ Although these images show general shapes, details are usually not discernible, and a further interpretation of this group of Constantinopolitan costume accessories and jewellery thus seems impossible.

As stated, insignia for high officials or the military were produced by the *barbaricarii* and/or the *aurifices specierum*, thus probably predominantly in Constantinople. However, none of the numerous extant belt buckles and bracelets can be securely identified as insignia. As mentioned, crossbow *fibulae* are likely candidates for an attribution to Constantinople, since they are depicted as insignia in contemporary representations of jewellery. Some crossbow *fibulae* have imperial inscriptions, but Deppert-Lippitz has convincingly argued that these were 'individually commissioned' 'according to [the owners'] tastes and ideas' and possibly made in 'minor local centres'.⁴⁷ Two gold crossbow *fibulae*, although without imperial inscriptions, are the likeliest candidates for being made by the *barbaricarii* and/or the *aurifices specierum* and thus possibly in Constantinople, as they have some details in common with other pieces of jewellery that follow the 'interregional' fashion.

The pierced work of a *fibula* from Apahida in Romania, as discussed by Deppert-Lippitz,⁴⁸ finds parallels in numerous other pieces of 5th-century jewellery from various findspots within the Byzantine Empire. This *fibula* may, therefore, have been made in Constantinople. The second *fibula* was found in a grave in Tournai in France in 1653, together with other pieces of jewellery, among them a finger-ring with the inscription *Childeric Regis*, which allows an identification of the grave as that of the Merovingian King Childeric (d. 481/2).⁴⁹ Childeric's *fibula* and his finger-ring are now lost, but engravings and reproductions provide evidence of the jewellery. The *fibula* was decorated with a pierced-work plaque with relatively small holes, a technical characteristic of pierced-work jewellery of the 4th and 5th centuries, and a rhombic decoration. A close parallel for the pierced-work decoration of Childeric's *fibula* has survived on a diadem from Varna in Bulgaria.⁵⁰ The latter is also decorated with a claw-setting and alternate square and circular settings – features of the 'interregional' fashion.

Two gold torcs with pendants from the Assiût hoard have recently been attributed by myself to an Egyptian workshop on the grounds of their techniques, shapes, and motifs.⁵¹ In addition, one of these torcs was worn by a woman as specified by an inscription. Thus, it seems impossible to link these torcs with the production of insignia in Constantinople. A third gold torc in the British Museum is said to come from the eastern Mediterranean, but its find context is unknown.⁵² To this torc probably once belonged a pendant similar to those that accompany the two Egyptian torcs. If this torc of unknown provenance was an insignia for a high civil or military official, it may have been made in Constantinople.

As stated, jewellery for the imperial family seems to have been made by the *aurifices specierum*. Images that show imperial insignia or jewellery should, therefore, reflect their work. Most information is provided by the above mentioned mosaics in San Vitale in Ravenna: Justinian, for example, wears a diadem that is decorated with stones in the imperial colours and with a *fibula* that terminates in white, tear-drop shaped beads. His *fibula* consists of a circular setting with a red inlay framed by a row of pearls and, above, a semi-circular green ornament, possibly a setting as well, with three protruding, tear-drop shaped blue stones. Three pendants, similar to those on his crown, are suspended from his *fibula*. Theodora's *fibula* resembles Justinian's, but her crown is more elaborate than that of her husband: it is decorated with rows of pearls, alternate rectangular and oval settings with green and red inlays, respectively, and tear-drop shaped blue stones; long pearl *pendilia* are suspended from her crown (Pl. 2). Her earrings consist of simple gold hoops from which are suspended a square setting with a green inlay and a wire pendant with a pearl and a tear-drop shaped green or blue bead. Similar earrings are also worn by most of the women in her retinue. In addition, Theodora wears a jewelled collar decorated with pearls. It has a rectangular claw-setting with a green inlay in its centre, framed by two ovoid claw-settings with red inlays. Several pendants of equal length with white, tear-drop shaped beads are suspended from the collar. Woman 3 is shown with a similar, but less elaborate collar with green tear-drop shaped pendants (Pl. 3). Such collars are frequently depicted on other imperial images, for example on ivories with the Empress Ariadne in Florence and Vienna.⁵³ Analogous to



Plate 2 Detail of the Empress Theodora from the mosaic in San Vitale, Ravenna

the crown with pendants and the *fibula* with pendants, these collars seem to have been reserved for female members of the imperial family from the 6th century through to the medieval period.⁵⁴ Furthermore, Theodora and woman 2 on the Ravenna mosaics wear necklaces with wire links and tear-drop shaped green beads. Woman 5 of Theodora's entourage is shown wearing a gold bracelet with a circular closure link, and woman 2 wears a simple finger-ring (Pl. 3).

Apart from the insignia, all the general jewellery types depicted on the Ravenna mosaics can be paralleled with women's jewellery from all over the Byzantine world and beyond. The same holds true for individual shapes like claw-settings, square settings with green inlays, the alternation of differently shaped settings, pendants with tear-drop shaped stones, and rows of pearls strung on wires. This indicates that 'interregional' techniques, shapes, motifs, and styles were known in imperial jewellery.

Two images seem to confirm the predominant role of emeralds, hyacinths, and pearls in imperial jewellery as indicated by *Codex Iustinianus* 11:12: the daughter of the Pharaoh in the 5th-century mosaics of Sta Maria Maggiore in Rome, and Agnes in the 7th-century apse mosaic of Sant' Agnese in Rome are both depicted in the robes of the Byzantine empress.⁵⁵ Their jewellery and garments are embellished with stones and beads in the colours of emeralds, hyacinths, and pearls: green, blue, and white.

A late 6th-century jewelled collar with pendants from the Assiût hoard, housed in Berlin,⁵⁶ probably belonged to a female member of the imperial family: such collars are frequently depicted on other imperial images, for example on the above mentioned Ravenna mosaics and on the Ariadne ivories (see note 53). Also, the Berlin collar uses materials that one would expect on imperial insignia – emeralds, sapphires, amethysts, and pearls – and its ornamental details resemble those



Plate 3 Theodora's entourage from the mosaic in San Vitale, Ravenna

'interregional' features that are shown on the jewellery on the San Vitale mosaics (Pls 2–3).

The technical and decorative details of a pair of bracelets and a necklace from the same hoard resemble those of the collar so closely that all these pieces were probably made as a set in the same workshop.⁵⁷ Their details confirm what has been proposed as Constantinopolitan on the grounds of contemporary representations of jewellery: the bracelets, for example, are of the same type as those worn by woman 5 of Theodora's entourage in the Ravenna mosaic panels (Pl. 3). In addition, all these possibly Constantinopolitan pieces from the Assiût hoard are decorated with claw-settings, square settings with green inlays, the alternation of differently shaped settings, and rows of pearls strung on wires.

The high settings and alternate square and circular settings of a jewelled cross in the Treasury of St Peter's, Vatican City, Rome, tally with those details that are shown on images of imperial jewellery and with those that appear on the Constantinopolitan group of jewellery from the Assiût hoard. The cross in St Peter's can be identified as an imperial dedication by its inscription, and has been attributed to Justin II (565–78) by Belting-Ihm.⁵⁸ It could, therefore, have been produced by the *aurifices specierum* and/or the *palatinis artificibus* in the capital. According to a legendary medieval account, five crosses decorated 'with various costly stones', possibly similar to the cross in St Peter's, were dedicated together with other liturgical objects to the church of Hagia Sophia in Constantinople by Justinian (527–65).⁵⁹

No image from the private realm seems to have survived that would provide information about private jewellery production in Constantinople: no ordinary woman is depicted wearing jewellery, for example, on the numerous figural sculptures from, or allegedly from, Constantinople in the Istanbul Archaeological Museum. In addition, the early



Plate 4 Gold finger-ring with bezel in the form of a lamp from Abuqir Bay, Egypt

Byzantine bronze costume accessories from the recent palace excavations in Istanbul have not been published yet, and no piece of Early Byzantine gold jewellery from a scientific excavation in the same city seems to be known. It is thus difficult to attribute jewellery to privately run workshops in the capital. It is, however, quite likely that these workshops copied the works of the *aurifices specierum* or *palatinis artificibus*, which were operating in the same city.

Conclusion

The wide geographical distribution of techniques, shapes, motifs, and styles in Early Byzantine jewellery can only be explained by the influence of one important, trend-setting workshop or workshop group. This workshop or workshop group was probably situated in Constantinople, where jewellery production can be divided into three sectors: the production of insignia for high officials and the military elite by the *barbaricarii* and/or the *aurifices specierum*; the production of imperial insignia and jewellery by the *aurifices specierum* and the production of ordinary men's and women's jewellery by privately run workshops. It seems impossible to tell, which of these three sectors was (most) responsible for the 'interregional' fashion, though the imperial jewellery produced by the *aurifices specierum* clearly shows 'interregional' features. Imperial jewellery is, therefore, the most likely trendsetter. There are a number of feasible possibilities as to how the 'interregional' fashion may have spread, for example through models, pattern books, or travelling craftsmen. However, as indicated by some of the jewellery from Abuqir Bay and other pieces, it can be excluded that all high-quality jewellery with 'interregional' techniques, shapes, motifs, and styles was made in Constantinople (Pls 1 and 4).

Notes

- 1 B. Segall, *Katalog der Goldschmiede-arbeiten. Museum Benaki Athen*, Athens, 1938, 143, no. 224.
- 2 Examples include: O.M. Dalton, *Byzantine Art and Archaeology*, Oxford, 1911, 543, who refers to Smirnov, in: *Zapiski de la Société Impériale Archéologique Russe. Section classique, byzantine et d'Europe occident XII*, 506–10; M. Chatzidakis, 'Un anneau byzantin du Musée Benaki', *Byzantinisch-neugriechische Jahrbücher* 17 (1944), 174–206, at 189; M.C. Ross in: K. Weitzmann (ed.), *Age of Spirituality. Late Antique and Early Christian Art, Third to Seventh Century. Catalogue of the Exhibition at the Metropolitan Museum of Art, November 19, 1977, through February 12, 1978*, New York, 1979, 298: 'the explanation for the widely scattered find-sites is that such objects were bestowed as imperial gifts on loyal retainers'; and K. R. Brown in Weitzmann *ibid.*, 316, no. 291.
- 3 St Petersburg, Hermitage, Inv. no. 96: A. Yeroulanou, *Diatrita, Gold Pierced-Work Jewellery from the 3rd to the 7th Century*, Athens, 1999, 285, no. 520; Nicosia, Archaeological Museum, Inv. no. J 500

- (see A. Pierides, *Jewellery in the Cyprus Museum*, Nicosia, 1971, 56, pl. XXXVIII:9 for the alleged findspot): Yeroulanou, *ibid.*, 283, no. 502; Paris, Louvre, Inv. no. Bj 2282: *eadem*, 282, no. 499; Budapest, Hungarian National Museum: L. Barkóczi, 'Das Gräberfeld von Keszthely-Fenekpuszta aus dem 6. Jahrhundert und die frühmittelalterlichen Bevölkerungsverhältnisse am Plattensee', *JbRGZM* 18 (1971), 179–91, at 183, pls 75:3f.; Alexandria, Bibliotheca Alexandrina – Archaeological Museum, Inv. SCA 102: F. Goddio and M. Clauss (eds), *Ägyptens versunkene Schätze*, Munich/New York, 2007, 361, no. 38, fig. on 248; Y. Stolz, *Early Byzantine Jewellery and Related Finds from the Underwater Excavations in Abuqir Bay in Egypt: their Classification, Production, and Function* (Oxford Center for Maritime Archaeology. Monographs), forthcoming, Diss., Oxford, 2007, 52f.
- 4 See n. 2.
- 5 Stolz (n. 3), 130–4.
- 6 See B. Pfeiler, *Römischer Goldschmuck des ersten und zweiten Jahrhunderts n. Chr. nach datierten Funden*, Mainz, 1970, 3, and B. Deppert-Lippitz, 'Römischer Goldschmuck. Stand der Forschung', *Aufstieg und Niedergang der römischen Welt II*:12:3, Berlin, 1985, 117–26, at 121. Based on mummy portraits, which almost always show jewellery of an 'interregional' fashion, she has observed that 'Rom selbst [has played] die führende Rolle, und vermutlich gingen die meisten Impulse von hier aus'. Before, Athens may have been a leading jewellery centre: see M. Frommer, 'Unprovenanced Greek Jewellery: the Question of Distribution', in D. Williams (ed.), *The Art of the Greek Goldsmith*, London, 1998, 79–84, at 80: 'in the Hellenistic period there definitely was a common style, a koine, but regional variations and preferences can also be detected'.
- 7 Various examples from the excavations of St Polyeuktos in Sarāḫane (see, for example, the buttons in R.M. Harrison, *Excavations at Sarāḫane in Istanbul I. The Excavations, Structures, Architectural Decoration, Small Finds, Coins, Bones, and Molluscs*, Princeton, 1986, 263f., nos 546–9) and in Üsküdar (as yet unpublished except for a medieval cross pendant); for these and other recent excavations in Istanbul refer to B. Öztuncay (ed.), *Gün İşığında. İstanbul'un 8000 yılı. Marmaray, Metro, Sultanahmet kazıları*, Istanbul, 2007.
- 8 Almost all published pieces of jewellery have been attributed to Constantinople, and it is thus impossible to list them all.
- 9 Munich, Private Collection CS, Inv. no. 378: A. Iacobi, 'Dextrarum iunctio'. Appunti su un medaglione aureo protobizantino', *Notizie da Palazzo Albani. Rivista di storia e teoria delle arti. Università degli studi di Urbino* 20, 1991, 49–66; L. Wamser (ed.), *Die Welt von Byzanz. Europas östliches Erbe. Glanz, Krisen und Fortleben einer tausendjährigen Kultur* (Schriftenreihe der Archäologischen Staatssammlung, 4), Stuttgart, 2004, 306f., no. 505; M.R. Rosenbaum-Alföldi, 'Ein rechtgläubiger Christ, ein Römer, einer mit allen herrscherlichen Tugenden soll gewählt werden', in G. Seitz (ed.), *Im Dienste Roms. Festschrift für Hans-Ulrich Nuber*, Remshalden, 2006, 27–33.
- 10 Y. Stolz, 'Kaiserlich oder bürgerlich? Ein Anhänger in München, frühbyzantinische Diademe und anderer Hochzeitsschmuck', *Mitteilungen zur Spätantiken Archäologie und Byzantinischen Kunstgeschichte* 6 (2008), 115–36.
- 11 J.-A. Bruhn, *Coins and Costume in Late Antiquity* (Dumbarton Oaks Byzantine Collection Publications), Washington DC, 1993; see also S.A. Boyd in: M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection, vol. II. Jewelry, Enamels and Art of the Migration Period. With an addendum by S. Boyd and St.R. Zwirn*, Washington DC, 1965/repr. 2005, 142, fn. 9 with further references.
- 12 Boyd (n. 11), 142f.
- 13 Pendant: Washington, Freer Gallery of Art, Inv. no. 09.67: W. Dennison, *A Gold Treasure of the Late Roman Period* (Studies in East Christian and Roman Art II), New York/London, 1918, 117–21, no. 2, pls I, X, XI; T. Lawton, 'The Gold Treasure', *Apollo* 258 (1983), 180–2, at 182, fig. 4; torc: New York, Metropolitan Museum of Art, Inv. no. 17.190.1664: Dennison, *ibid.*, 108–17, 121–7, no. 1, pls I, Vif.; Wamser (n. 9), 290f., no. 485.
- 14 On the Assiût material, see Y. Stolz, 'Eine kaiserliche Insignie? Der Juwelenkragen aus dem sog. Schatzfund von Assiût', *JbRGZM* 53 (2006), 521–603, at 555–62; for the bracelets in Washington DC, Dumbarton Oaks Collection, Inv. no. 38.64, 38.65: Ross (n. 11), 44–6, no. 46, pls XXXVI, XXXVII; I. Baldini Lippolis, *L'oreficeria*

- nell'impero di Costantinopoli tra IV e VII secolo, Bari, 1999, 183, no. 2.VI.I.C.3–4.
- 15 H. Maguire, 'Magic and Money in the Early Middle Ages', *Speculum* 72/4 (1997), 1037–43.
 - 16 B. Deppert-Lippitz, 'A Late Antique Crossbow Fibula in the Metropolitan Museum of Art', *Metropolitan Museum Journal* 35 (2000), 39–70, at 63.
 - 17 B. Arrhenius, *Merovingian Garnet Jewellery. Emergence and Social Implications. With Diffraction Analysis by Diego Carlström*, Stockholm, 1985, 100–26; see also B. Arrhenius, *Granatschmuck und Gemmen aus nordischen Funden des frühen Mittelalters*, Stockholm, 1971, 115–27.
 - 18 See also E. Foltz, 'Review', *Offa* 43 (1986), 379–81, and K. Vielitz, *Die Granatscheibenfibeln der Merowingerzeit* (Europe Médiévale 3), Montagnac, 2003, 24–6.
 - 19 See Arrhenius 1985 (n. 17), 119, map I for the distribution of findspots.
 - 20 K.R. Brown, 'The Mosaics of San Vitale: Evidence for the Attribution of some Early Byzantine Jewelry to Court Workshops', *Gesta* 18/1 (1979), 57–62; on the necklace in New York, Metropolitan Museum of Art, Inv. no. 17.190.153; Yeroulanou (n. 3), 215, no. 61.
 - 21 Stolz (n. 3), 29.
 - 22 On the *comes sacrarum largitionum* in general: J.P.C. Kent, in: E. Cruikshank Dodd, *Byzantine Silver Stamps. With an excursus on the Comes Sacrarum Largitionum by J.P.C. Kent* (Dumbarton Oaks Studies VII), Washington DC, 1961, 35–45; R. MacMullen, 'The Emperor's Largesses', *Latomus* 21 (1962), 159–66; A.H.M. Jones, *The Later Roman Empire 284–602. A Social Economic and Administrative Survey*, Norman, 1973, 427–37; P.C. Berger, *The Insignia of the Notitia Dignitatum. A Contribution to the Study of Late Antique Illustrated Manuscripts*, New York, 1981, 67–75; T. Hackens and R. Winkes (eds), *Gold Jewellery. Craft, Style and Meaning from Mycenae to Constantinople*, Louvain-la-Neuve, 1983, 142; R. Delmaire, *Largesses sacrées et res privata: l'aerarium impérial et son administration du IVe au VIe siècle* (Collections de l'École française de Rome 121), Rome, 1989; primary sources include: *Not. Dig. Or. XIII* and *Not. Dig. Occ. XI* (C. Neira Faleiro, *La Notitia Dignitatum. Nueva edición crítica y comentario histórico* [Nueva Roma 25], Madrid, 2005, 201–03, 363–9); *CTH* 6:30; *CIC* 12:23:7 (P. Krueger [ed.], *Corpus Iuris Civilis II. Codex Iustinianus*, Berlin, 1954, 464); *CIC* 11:8:13 (*ibid.*, 431; both from 7 March 426); see also *CTH* 10:20 (from 21 July 317) on the social status of imperial workers.
 - 23 Kent (n. 22), 44.
 - 24 Jones (n. 22), 428. Other *scrinia*, as listed in the *Notitia Dignitatum*, include the *scrinium vestiarii sacri*, the *scrinium argenti*, the *scrinium miliarensibus* (for silver bullion and silver coins), and the *scrinium a pecuniis* (for copper currency).
 - 25 *CIC* 12:22:7 (Krueger [n. 22], 464).
 - 26 On the use of gold and silver by the *barbaricii* see: *CTH* 10:22:1 (from 11 March 374) and Kent (n. 22), 44; see also W.G. Sinnigen, 'Barbaricii, Barbari, and the Notitia Dignitatum', *Latomus* 22 (1963), 806–15 on the *barbaricii* and R. MacMullen, 'Inscriptions on Armor and the Supply of Arms in the Roman Army', *American Journal of Archaeology* 64/1 (1960), 23–40 on the decoration of armour.
 - 27 Jones (n. 22), 428.
 - 28 In Alexandria under Justin II (565–78), during the Heraklios revolt (608–10) and under Heraklios perhaps in 617, in Carthage from 540, in Chersonesus under Heraklios and Constans II (610–68), in Cyprus in 608/610 and possibly later until 629, in Mediolanum in the 5th century, in Naples possibly from Constantine IV (668–85) or Justinian II (685–95) until Leo III (717–41), in Ravenna in the 5th century and from 539/540 until 751, in Rome between 540 and 546 and later under Tiberius II (578–82) until around 780, in Sardinia from 680 until Leo III (717–41), in Sicily from Tiberius I (578–82) to 878, and in Thessaloniki from 474/475 to 630; see, for example, W. Hahn, *Moneta Imperii Byzantini von Heraclius bis Leo III./ Alleinregierung (610–720). Rekonstruktion des Prägaufbaues aus synoptisch-tabellarischer Grundlage III* (Österreichische Akademie der Wissenschaften. Veröffentlichungen der numismatischen Kommission, 10), Vienna, 1981, 289–91; P. Grierson, *Byzantine Coinage*, Washington DC, 1999, 5; C. Morrisson, 'Byzantine Money. Its Production and Circulation', in A. Laiou (ed.), *The Economic History of Byzantium: from the Seventh through the Fifteenth Century* (Dumbarton Oaks Studies, 39), Washington DC, 2002, 909–66, at 911f. with table 1.
 - 29 M. Mundell Mango, 'The Origin of the Syrian Ecclesiastical Silver Treasures of the Sixth-Seventh Centuries', in N. Duval and F. Baratte (eds), *Argentierie romaine et byzantine. Actes de la table ronde. Paris 11–13 octobre 1983*, Paris, 1988, 163–84, at 169.
 - 30 *CTH* 10:22:1 (from 11 March 374).
 - 31 *ODB* 2, 1991, s.v. Mints, 1377.
 - 32 *Ibid.*
 - 33 Zosimos, *New History*, 4.40.8 (W. Green and T. Chaplin, *The History of Count Zosimos, sometime Advocate and Chancellor of the Roman Empire*, London, 1814); *SHA* Claudius 14:2; *SHA* Probus 4:5, 5:1; see also MacMullen (n. 22), 159–61: 'the most frequent recipient of imperial largesses of all sorts was no doubt the army' (*ibid.*, 164); for illustrations of gold insignia (belt buckles and fibulae) in the *Notitia Dignitatum* refer to Neira Faleiro (n. 22), 201, 205, 363, 370. See also Deppert-Lippitz (n. 16) for fibulae with imperial inscriptions.
 - 34 The term *νάκινθος* appears already, for example, in the Greek bible (*Exod.* 25:4) and later in Pliny, *Nat. Hist.* 37,9,41:125f. By context and for etymological reasons, it becomes clear that the term describes a stone in the colour of the Hyacinthus blossom, which can be blue or purple. In addition, Claudianus refers in his *Paneg. de IIII. Consulatu Honorii*, 585ff. to the blue fire of the stone: *temperat arcanis hyacinthi caerulea flammis* (see n. 36). *Yάκινθοι*, therefore, seem to be amethysts or sapphires. On the hyacinth, see also Drauschke, this volume.
 - 35 *CIC* 11:12 (Krueger [n. 22], 433).
 - 36 Claudianus, *Paneg. de IV. Consulatu Honorii Augusti*, 585–8 (W. Barr, *Claudian's Panegyric on the Fourth Consulate of Honorius. Introduction, Text, Translation and Commentary* [Liverpool Latin Texts. Classical and Medieval, 2], Liverpool, 1981, 62, transl., 63): *Asperat Indus/velamenta lapis pretiosaque fila smaragdis/ducta virent; amethystus inest et fulgor Hiberus/temperat arcanis hyacinthi caerulea flammis* ('Indian stones bead the robe and the costly fine-spun stuff is green with emeralds; amethysts are worked in and the brightness of Spanish gold tempers the blue of the hyacinth with its hidden fires'). For the images see n. 55.
 - 37 In C.E. Otto, B. Schilling and C.F.F. Sintenis (eds), *Das Corpus Iuris Civilis VI*, Leipzig, 1832, 548, *curcumii* is translated with 'Gebisse', bits, or sets of teeth. There seems to be no other known occurrence of this word.
 - 38 On women's jewellery see also: *Dig.* 34:2:25:10 (P. Krueger [ed.], *Corpus Iuris Civilis I. Institutiones. Digesta*, Berlin, 1954, 525): *Ulpianus 44 ad sab. Ornamenta muliebria sunt, quibus mulier ornatur, veluti inaures armillae viriolae anuli praeter signatorios et omnia, quae ad aliam rem nullam parantur, nisi corporis ornandi causa: quo ex numero etiam haec sunt: aurum gemmae lapilli, quia aliam nullam in se utilitatem habent.*
 - 39 Given that the prefect of Africa earned 100 pounds of gold per year, the proconsul of Cappadocia and the *augustalis* of Alexandria only 20 and 40 pounds respectively, and all lower officials less, as indicated by the same Codex, this is an unpayable fine; C. Morrisson and J.-C. Cheynet, 'Prices and Wages in the Byzantine World', in Laiou (n. 28), 815–78, at 859–61, table 16.
 - 40 *Book of the Prefect* 2:11 (J. Koder [ed.], *Das Eparchenbuch Leons des Weisen. Einführung, Edition, Übersetzung und Indices* [Corpus Fontium Historiae Byzantinae, 33], Vienna, 1991, 88f.).
 - 41 *Ibid.*, 2:10 (Koder, 88f.).
 - 42 M. Mundell Mango, 'The Commercial Map of Constantinople', *DOP* 54 (2000), 189–207, at 197 and fig. 20; see also H. J. Magoulas, 'Trades and Crafts in the Sixth and Seventh Centuries as Viewed in the Lives of the Saints', *Byzantinoslavica* 37 (1976), 11–35, at 22f. for a discussion of an account in the *Miracula S. Artemii* 25, in which it is mentioned that a smithy was located in the porticoes of Domninos.
 - 43 Neira Faleiro (n. 22), 201, 205, 363, 370.
 - 44 Brown (n. 20).
 - 45 London, British Museum, Inv. no. PE 99.4–25,2; Weitzmann (n. 2), no. 493.
 - 46 O.M. Dalton, 'A Byzantine Silver Treasure from the District of Kerynia, Cyprus, Now Preserved in the British Museum', *Archaeologia* 57/1 (1900), 159–75, at 159–63; R. Delbrück, *Die Consulardiptychen und verwandte Denkmäler* (Studien zur spätantiken Kunstgeschichte im Auftrage des Deutschen Archäologischen Instituts 2), Berlin, 1929, 70, with fig. 25 on 69.

- 47 Deppert-Lippitz (n. 16), 63.
- 48 Bucharest, Muzeul National de Istorie a Romaniei.
- 49 Deppert-Lippitz (n. 16), 57–9, with fig. 20.
- 50 Varna, Archaeological Museum, Inv. no. III 557: Yeroulanou (n. 3), 216, no. 68; V. Pace (ed.), *Treasures of Christian Art in Bulgaria*, Sofia, 2001, 132–5, no. 28:1.
- 51 New York, Metropolitan Museum of Art, Inv. no. 17.190.1664 and Berlin, Antikensammlung, Inv. no. 30219, 506: Stolz (n. 14), 556f.
- 52 London, British Museum, Inv. no. PE 1984,5-2,1: probably A. Sambon, *Collection de M. Guilhou. Objets antiques. Orfèvrerie, céramique, bronzes, ivoires, etc.*, Paris, 1905, 12, no. 53, pl. III; M. Hockey, 'The Composition and Structure of a Byzantine Torc', *Jewellery Studies* 3 (1989), 33–9. For the fragment of another possibly Byzantine torc see, A. Roes, 'Some Gold Torques Found in Holland', *Acta Archaeologica* 18 (1947), 183–5.
- 53 For a coloured image of Theodora see, G. Bovini, *Ravenna und seine Mosaiken*, Munich, 1962, fig. 41; Ariadne in Florence, Bargello: W.F. Volbach, *Elfenbeinarbeiten der Spätantike und des frühen Mittelalters*, Mainz, 1976³, 49f., no. 51, pl. 27; Ariadne in Vienna, Kunsthistorisches Museum: *ibid.*, 50, no. 52, pl. 27.
- 54 Stolz (n. 14), 521–603.
- 55 Daughter of the Pharaoh: J. Wilpert and W. N. Schumacher, *Die römischen Mosaiken der kirchlichen Bauten vom IV.–XIII. Jahrhundert*, Freiburg im Breisgau/Basel/Vienna, 1976, pl. 37; Agnes: C. Bertelli (ed.), *Die Mosaiken. Von der Antike bis zur Gegenwart*, Augsburg, 1996, fig. on 88f.; M. Andaloro and S. Romano, *Römisches Mittelalter. Kunst und Kultur in Rom von der Spätantike bis Giotto*, Regensburg, 2002, 62, fig. 63.
- 56 Berlin, Antikensammlung, Inv. no. 30219,505: Stolz (n. 14), 521–603; see also, R. Cormack and M. Vassilaki (eds), *Byzantium 330–1453*, London, 2008, 168–9, no. 121.
- 57 New York, Metropolitan Museum of Art, Inv. no. 17.190.1670, 17.190.1671: Stolz (n. 14), 538f., 543f.; see also Yeroulanou (n. 3), 245, no. 228; Berlin, Antikensammlung, Inv. no. 30219, 508b: Wamser (n. 9), 295, no. 490.
- 58 C. Belting-Ihm, 'Das Justinuskreuz in der Schatzkammer der Peterskirche zu Rom', *JbRGZM* 12 (1965), 142–66.
- 59 *Narratio de S. Sophia* 24 (T. Preger, *Scriptores originum Constantinopolitanarum*, Leipzig, 1901, 74ff.); see also C. Mango, *The Art of the Byzantine Empire 312–1453. Sources and Documents* (Sources and Documents in the History of Art Series), Englewood Cliffs, 1972, 100.

Important Bracelets in Early Christian and Byzantine Art

Aimilia Yeroulanou

With the transfer of the imperial capital to Constantinople, the centre of gravity of not only the administration but also of artistic development moved to the East. Specific changes took place and, in art in particular, these led to an aesthetic displaying obvious Hellenistic influences and with ancient roots in the eastern Mediterranean. Art, primarily sculpture made during the preceding period of the military emperors and the tetrarchs, witnessed an upsurge of heavy figures in frontal poses, characterised by harsh features and geometric treatment of garments. These traits cannot be attributed to technical ineptitude or an inability to imitate Classical models. On the contrary, they were the result of a conscious choice of styles designed specifically to serve the needs of propaganda, to transmit from above messages of political power and totalitarianism.

Beginning in the reign of Constantine the Great, however, we can detect a merging of these traits with other, lighter, classicising models, characteristic of the eastern Mediterranean; these were destined ultimately to prevail in the formation of the art of Constantinople. This phenomenon can be seen, for example, in large scale sculpture such as the sarcophagus of Junius Bassus,¹ on which an Early Christian thematic repertoire also appears. Such works of Hellenistic character reveal the technical ability of their creators as well as the orientation of the sophisticated and educated strata of society, who endeavoured to keep this tradition alive. It is no accident that this tendency is particularly evident on luxury objects such as the ivory diptych of Symmachon and Nikomachon² executed with a purely classical rendering of the figures and Greek iconography.

Similarly, a large number of silver vessels dating from the 2nd to the 5th century are decorated with classicising figures in mythological scenes.³ This trend was prevalent even in the western provinces of the Empire, as evidenced by major treasures or hoards such as those found at Mildenhall⁴ and Kaiseraugst,⁵ despite many questions concerning the origin of these objects and their absolute dating. Classical remnants including gods and heroes, symbols, vegetal motifs and geometric patterns survived and were repeated conscientiously on silver vessels made as late as the 7th century, appearing alongside Christian subjects, as for example on the David plates from the second Cyprus treasure.⁶

In jewellery this classicising trend is especially apparent in the decoration, which had already excluded the human figure from its thematic repertoire, but retained floral and geometric motifs which emanate a delicacy and grace which recall Hellenistic creations.⁷ The shape and decoration of some bracelets which survived essentially throughout the duration of Byzantine goldwork serve as examples of this tendency.

With few exceptions, characteristic elements of Hellenistic jewellery such as the Herakles knot, coiled snakes bracelets



Plate 1 Bracelet, Washington DC, Dumbarton Oaks Collection (Acc. no. 3866)

and bracelets with animal-headed terminals steadily diminished in popularity throughout the Roman period up to the 3rd century.⁸ One survival of the latter type (**Pl. 1**) is a bracelet with confronted panthers in the Dumbarton Oaks Collection.⁹ The felines' bodies are rendered with particular care, while their forelegs hold a mount for a precious stone. The combination with the pierced-work technique on the back of the mount suggests the bracelet should be dated to the 7th century. Even if the earlier dating proposed by Zwirn¹⁰ proves not to be valid, nonetheless the craftsman was surely familiar with bracelets with animal-head terminals and the manner of rendering them.

Another category is that of bracelets composed of interlocking elements; these, too, are of Hellenistic origin. An interesting example is the bracelet in the Zintilis Collection,¹¹ now in the Museum of Cycladic Art in Athens (**Pl. 2**). It comprises a row of interlinked plaques with inlaid stones, now lost, and light pierced-work filling decoration; the central plaque was set with a larger stone. It can be related to a corresponding necklace in the same collection and is dated to the late 4th century. Much later is a bracelet in the Pantalica Treasure,¹² with rows of interlocking heart-shaped elements, each one enclosing an arrowhead motif. This bracelet is dated to the 7th century. It is puzzling, given how common this technique is on necklaces, that bracelets with interlocking elements have not survived in greater numbers.

The bracelet type of greatest longevity was that with a hoop formed from two moveable parts fashioned of thick wire or of thin cylinders intertwined, secured by a plain or more



Plate 2 Bracelet, Athens, Cycladic Museum (Thanos Zintilis Collection)



Plate 3 Bracelet with Athena, New York, The Metropolitan Museum of Art, Gift of J. Pierpont Morgan (Inv.-no. 1917.17.190.2053)



Plate 4 Bracelet with busts of Christ and the Virgin, Athens, National Archaeological Museum, Stathatos Collection



Plate 5 Pair of bracelets, Washington DC, Dumbarton Oaks Collection (Acc. nos. 38.64–65)

Plate 6 Pair of bracelets with agates, Richmond, Virginia Museum of Fine Arts, Purchase, The Adolph D. and Wilkins C. Williams Fund (67.52.32.1/2)





Plates 7a-7b Bracelets from the Mytilene Treasure, Athens, Byzantine Museum

elaborate clasp. In the 3rd century the clasp was formed by a mounted precious stone.¹³ An interesting 5th-century example of such a bracelet, in the Metropolitan Museum of Art,¹⁴ has a clasp with a medallion representing the head of Athena, another example of the partiality for Greek subject matter (Pl. 3). The very wide diffusion of bracelets with twisted hoops is illustrated by examples in the Thetford¹⁵ and the Ténès¹⁶ treasures, as well as those in copper-alloy from Thessalonica.¹⁷ Taken together, these testify to the international character of Late Roman and Early Christian jewellery.

A further pair of bracelets from Thessalonica, in the Stathatos Collection, with a hoop formed from twisted bars, has terminals in the form of two facing heart-shaped plaques. (See Bosselmann-Ruickbie this volume, Pls 1–2.) The plaques feature a composition with two birds on either side of a tree; a representation also known on earrings in the 7th century. These bracelets have been dated to the 11th century. Of the same period are the braided bracelets in the same collection displaying busts of Christ and the Virgin (Pl. 4), which by this time are purely amuletic in character.¹⁸

Closely related in form to the bracelets formed from twisted bars are those with braided hoops. One pair, with a clasp with a group of five coins up to the reign of Heraklios, is in the Dumbarton Oaks Collection (Pl. 5).¹⁹ Another, with two copies of coins in a corresponding arrangement, is in Berlin and comes from Egypt, from the ensemble known as the Assiût treasure.²⁰ One further bracelet from the same treasure, again with a braided hoop, has a cluster of 13 precious and semi-precious stones on the clasp, in an arrangement corresponding to that on a bracelet in the Louvre.²¹ This will be examined later as its hoop is formed from a pierced-work band.

Composite bracelets, formed essentially from tubular hoops of various shapes and with relief decoration, are encountered from the 4th century onwards. One fine bracelet in the collection of the Virginia Museum of Fine Arts, and a corresponding one in the de Clercq Collection,²² have hoops of semi-circular cross-section, i.e. the inner side is flat. Two other bracelets of irregular shape, again from Virginia (Pl. 6),²³ also belong in this group. One has inlaid stones and they can be dated to the late 3rd or the early 4th century.

The bracelets from the Mytilene treasure also have tubular hoops (Pl. 7a), although much finer and with a characteristic

thickening towards the centre.²⁴ Among them is an important example with cruciform monograms (Pl. 7b). Bracelets with similar hoops are known also from Constantinople, the Mersin treasure and from Cyprus. All are dated to around the 7th century.

Returning again to the 4th and 5th centuries, to the basic shapes of this period, that is of bracelets with hoops of semi-circular cross-section and bracelets with moveable clasps, we observe that the pierced-work technique prevails in the rendering of the decoration, with a few cases in which relief is used.

On perusing the groups of pierced-work bracelets, the wealth of shapes, designs and decoration in this unique period of jewellery production, becomes apparent. Initial stages of the technique appear in similar bracelets composed of a pierced-work band with intermediate circular discs without decoration.²⁵ It is possible that they were interposed to consolidate the pierced-work surface, given that it is fine and vulnerable to damage. On the pierced-work parts checkerboard patterns alternate with a simplified rinceau with tiny ivy leaves. The workmanship of the pierced-work surface could be characterised as rough, in comparison with the finer compositions of the next group of bracelets. It displays closer affinity to the *opus intarsiate* of coin mounts from the West, such as some pieces from the Beaurains treasure, dated to the late 3rd or the early 4th century.²⁶

On almost all the bracelets, an attempt was made to insure their durability against wear and tear by leaving areas of gold between the pierced-work parts. A bracelet in the British Museum (Pl. 8) has four blank elliptical discs, in combination with scenes of the vintage and the chase.²⁷ Here, the pierced-work surface is limited and of a less formalised design. Scenes of hunting or of harvesting grapes are particularly frequent on bracelets of the period, such as the bracelet with *putti* engaged in the vintage, from Desana.²⁸

Such scenes also appear on three bracelets from the Hoxne treasure (Pl. 9), of the late 4th or the early 5th century. One bracelet has, in addition, cut-out surfaces engraved with a youthful head. On all these examples, the pierced-work surfaces are of limited extent and more random design. Two other pairs, with rows of circles and lozenges, between which are pierced-work scrolls, are unique examples, as is one other



Plate 8 Bracelet, London, British Museum (GR AF 2817)



Plate 9 The group of 19 bracelets from the Hoxne Treasure, London, British Museum (PE 1994,4-8,11-29)



Plate 10 Bracelet with inscription from the Hoxne Treasure, London, British Museum (PE 1994,4-8,29)



Plate 11 Bracelet, Los Angeles, The J. Paul Getty Museum (83.AM.227.3)



Plate 12 Bracelet, Washington DC, Dumbarton Oaks Collection (Acc no. 75.1)



Plate 13 Bracelet from the Ténès Treasure, Algiers, Musée National des Antiquités



Plate 14 Bracelet, Berlin, Staatliche Museen, Antikensammlung (30219, 509)

bracelet from the same hoard, with horizontal and vertical bands creating panels of pierced-work scrolls of the same simple workmanship as the previous bracelets. The bracelet with the openwork inscription, *VTERE FELIX DOMINA IULIANE*, which serves the same function of consolidation of the openwork surface, belongs to the class of jewellery with inscriptions.²⁹ This last bracelet, another with mainly blank circular discs on the surface, is reminiscent of eastern Mediterranean traits such as the pierced-work decoration that forms around the discs, nested lozenges and a straight stem with tiny ivy leaves placed symmetrically on either side (Pl. 8).³⁰

Exceptionally fine and strictly disciplined workmanship also appears on a bracelet in the Getty Museum, on which concentric circles of very fine stems are formed around small animals, birds, leaves and rosettes (Pl. 11).³¹ Exactly the same arrangement is seen in the concentric circles and lozenges on a bracelet in the Dumbarton Oaks Collection (Pl. 12),³² despite the fact that on the criterion of shape it belongs within the category of bracelets with moveable geometric openings. Nonetheless, the similarity in the rendering of the pierced-work surface permits its almost certain attribution to the same workshop.

In every attempt at classifying or dating pierced-work jewellery it is important to focus on the motifs and themes of the decorative programme of the pierced-work surface and secondly on the shapes, the use of stones, and so on.

On the bracelet from the Ténès Treasure (Pl. 13),³³ a geometric border encloses the vine leaves and the birds, with a more lavish interposing of gold surfaces. The same principle is applied on the large bracelet from the Hoxne Treasure, with the cut-out leaves.³⁴ Here, however, a lack of balance is observable in the arrangement of the decorative motifs. More accomplished is the composition on the Audemer bracelet, where oak leaves are interposed between the wavy band, while the pierced-work scroll is extremely fine and balanced.³⁵

These large bracelets recall a pair from Syria, now shared between Berlin (Pl. 14) and Saint Louis in the USA.³⁶ The bracelet hoop differs and is of hexagonal cross-section, has no cut-out surfaces and is rendered completely in pierced work, with concentric geometric shapes. The workmanship is remarkably fine, so that the surface almost resembles filigree. In the central zone of both bracelets is the Greek inscription *EYTYXΩΣ ΧΡΩ ΔΙΑ ΒΙΟΥ* ('use it for [your] luck throughout life') and *ΨΥΧΗ ΚΑΛΗ ΥΓΙΑΙΝΟΥΣΑ ΦΟΡΙ* ('beautiful, healthy soul, wear it'). These bracelets are among the most



Plate 15 Bracelet, Cologne, Römisch-Germanisches Museum (1498)

important and typical examples of the pierced-work technique.

Some bracelets with hoops in the form of a pierced-work band (Pl. 15) are enriched with precious stones. One pair from the de Clercq Collection and one bracelet in the Cabinet des Médailles, Paris, are of the same shape, with two zones of pierced-work scrolls separated by tooled wire.³⁷ The only difference is that the single bracelet in the Cabinet des Médailles has a moveable clasp. The pierced-work scroll is also the same on the two bracelets, with a clear design rendered on a rather thick surface, so that the scroll has substance and is discernible on the reverse too. A bracelet from Cologne³⁸ is also in the form of a fine pierced band with precious stones (Pl. 15). The scrolls in particular, which describe a large *pelta*, bring to mind the corresponding design on the medallions of Constantine the Great.³⁹

To the group that combines pierced-work technique with inlaid precious stones belong also some bracelets with hoops of semi-circular cross-section but which are not closed at the back, like the tubular bracelets. In this way they achieve the desired transparency. On a pair of high quality bracelets in the Virginia Museum of Fine Arts (Pl. 16), the running scroll, above and below the settings with sapphires and emeralds, forms extremely fine concentric circles with details that are encountered on other bracelets.⁴⁰ The delicacy and the balance of the accomplished workmanship are due to the manner in which the pierced work is executed, by excising the gold completely and neatly, leaving the design clearly visible on the reverse as well. Very closely related are a bracelet from the Ashmolean Museum in Oxford and one in the Römisch-



Plate 16 Pair of bracelets, Richmond, Virginia Museum of Fine Arts, The Adolph and Wilkins C. Williams Fund (67.52.31.1/2)



Plate 17 Bracelet, Los Angeles, The J. Paul Getty Museum (83 AM 227.2)

Germanisches Museum in Mainz.⁴¹ The pierced-work decoration on the Oxford bracelet is slightly denser, with lozenges enclosing vine leaves, and shares elements in common with the last examples. The design can be seen very clearly on the back. The decoration on the Mainz bracelet is different, because the interlace that is usually a filling motif surrounding the shapes, is here the main subject and leaves along the rim other motifs, which do not appear, however, to be correctly distributed. On a pair of bracelets in the Cabinet des Médailles with hoops of semi-hexagonal cross-section, the decoration between the inlaid stones⁴² is simple and includes Greek inscriptions. The latter, together with all the other elements, argue for an eastern Mediterranean origin for these pieces of jewellery.

The last example in this important category is the large bracelet set with precious stones and of semi-hexagonal cross-section, in the J. Paul Getty Museum (Pl. 17).⁴³ The wide band is filled with mounted stones and sockets in which pearls were strung. The pierced-work decoration, somewhat restricted by the stones, has been worked from the front, leaving just holes on the back. Even so, the type of scroll and the details are sufficiently akin to the previous examples and certainly constitute an outstanding example of the goldsmith's art, with many similar elements that undoubtedly point to a common origin.

Whereas the entire preceding category is distributed between the 4th and the 5th century, the next category, composed of bracelets that have a clasp of geometric shape, begins in the 3rd century with a bracelet in the de Clercq Collection, and continues until the 7th century.⁴⁴ Like the Dumbarton Oaks bracelet (Pl. 12), the one in the Louvre⁴⁵ has a



Plate 19 Bracelet, London, British Museum (PE AF 351)

square clasp with nine inlaid stones and its hoop is very closely worked with tiny squares each enclosing a cross. The hypothesis that the subject has Christian connotations cannot be ruled out, as this bracelet, like the next pair, has been dated to the 5th century. A pair from Egypt has pierced-work decoration on both the hoop and the circular clasp (Pl. 18). They, too, are very compactly worked with geometric patterns, between which are small birds.⁴⁶ It is not without significance that small crosses are represented at the centre of the hoops. The absence of engraving on the surfaces of the birds is reminiscent of the rendering of the birds and the leaves on the bracelet from the Ténès treasure (Pl. 13).

A high point among the pierced-work bracelets is an example in the British Museum, with a bust of the Virgin on the disc of the clasp (Pl. 19).⁴⁷ By the 6th century, jewellery often had an overtly religious content. On the hoop is a *rinseau* that emerges from a vase and encloses a bird in each scroll. The decoration here is free, with larger interstices so that the design is absolutely clear on both the front and back. Also dated to the 6th century are two bracelets in the Benaki Museum (Pl. 20), on which the pierced-work discs of the clasps are decorated with a scroll emerging from a cornucopia, a design which is replicated in *repoussé* on the hoops.⁴⁸ The correspondence between this specific subject and the manner of its execution with the decoration on the cross of Justin II, allows us to date them to the second half of the 6th century. We have clearly moved on to a new phase in pierced work, with large cut-out designs; this too encompasses many important pieces of jewellery.

Also belonging to this period is a *repoussé* bracelet (Pl. 21a), as well as a fragment of its pair (Pl. 21b) in the Dumbarton



Plate 18 Pair of bracelets, New York, Metropolitan Museum of Art, Gift of J. Pierpont Morgan (Inv.-no. 7.190.1668–1669)

Oaks Collection: this has a scene on its circular clasp of an emperor in a chariot accompanied by Victories.⁴⁹ Depicted on the hoop is a vine branch enclosing animals and birds. Two bracelets of the same type were found at Hebron in Palestine. On another group of bracelets, vine stems enriched with leaves and bunches of grapes are worked on the hoop (Pl. 22). The bracelets in the second Lambousa treasure, on which the same symmetrical vine stem also fills the disc of the clasp,⁵⁰ are characteristic of this type. The Lambousa treasure includes some of the most important pieces of jewellery known from the 6th to 7th century.

Two more pairs of bracelets, also with vine stems, but varied by the addition of precious stones, are known: one is from the Assiût treasure,⁵¹ now in Berlin, the other from Varna in Bulgaria (Pl. 23).⁵² The first have openwork vine scrolls as part of the hoop and a clasp, which are slightly wider than the height of the hoops, in the shape of multi-petalled rosettes. On the second pair, the vine scrolls are contained between two fixed tooled wires that form the hoops, laden with bunches of grapes formed by pearls and leaves of pale green stone. Finally, one more important bracelet with a hoop and circular clasp

from the Assiût treasure, now in the Metropolitan Museum of Art, is encrusted with splendid precious stones and only the reverse of the disc has a design of pierced-work interlace (Pl. 24).⁵³

Bypassing the dark age of the 8th century, we come to the period when the use of enamel prevails in the goldsmith's art. It features mainly on ecclesiastical objects, icons, book covers, and so on, preserved in church sacristies, while items of jewellery are few and these predominantly religious amulets. One exception is the pair of armbands from Thessalonica (Pl. 25), a unique example of enamelling, which continues the tradition of depicting birds and plant motifs with particularly harmonious colours.⁵⁴

There is a notable decline in both the production and the quality of bracelets surviving from the subsequent periods of Byzantine art. Wars, looting, and economic difficulties were all factors that contributed to this apparent decline in jewellery. Even so, representations of emperors bedecked in magnificent jewellery, and of ordinary persons too, as attested by the wall-paintings in the early 14th-century church of St Nicholas the Orphan in Thessalonica, as well as other representations,



Plate 20 Pair of bracelets, Athens, Benaki Museum (1835–1836)



Plates 21a and b Repoussé medallions of a bracelet, Washington DC, Dumbarton Oaks Collection (Acc. no. 50.37)



Plate 22 Pair of bracelets, New York, Metropolitan Museum of Art, Gift of J. Pierpont Morgan (Inv. no. 17.190.148–149)



Plate 23 Pair of bracelets, Varna, Narodni Museum



Plate 24 Bracelet, New York, Metropolitan Museum of Art, Gift of J. Pierpont Morgan (Inv.-no. 17.190.1670–1671)



Plate 25 Pair of bracelets, Thessalonika, Museum of Byzantine Culture (BKU 262/6)



Plate 26 Bracelet, Athens, P. and A. Kanellopoulos Museum (no. 14)

indicate that a love of luxury continued to exist. Bracelets continued to be produced with a band hoop. The most important example of this group which dates to the 11th–12th century is the bracelet in the Kanellopoulos Collection, on which lions, griffins and birds are represented on either side of a braided *repoussé* stem (Pl. 26).⁵⁵ This piece is made of gold and along the edges is a palmette volute picked out in niello. There is a corresponding silver bracelet with the same representations of animals and the niello scroll on the edge, in the Dumbarton Oaks Collection (Pl. 27),⁵⁶ and a similar but wider bracelet in the Museum of Fine Arts, Boston.

One bracelet in the Benaki Museum has griffins inscribed in squares all around the hoop (Pl. 28).⁵⁷ Even though the griffin was a common subject in ancient Greek art, here it may bear witness to Islamic influence in this period, because fantastic creatures of this kind were much in vogue in Constantinople, both in ceramics and textiles. Griffins in the same arrangement are encountered also on a silver bracelet in the Virginia Museum of Fine Arts, although on this example the borders enclosing the design are more pronounced and the hoop is much narrower.⁵⁸ On one other bracelet in the Benaki Museum, square panels enclose pseudo-Kufic letters inlaid in niello, while the whole is surrounded by a band of scrolls.⁵⁹

The last two bracelets in this survey, again from the Benaki Museum, appear to be related to the previous ones in their material, their nielloed decoration and their shape (Pl. 29).⁶⁰



Plate 28 Silver bracelet, Athens, Benaki Museum (11454, 11455)



Plate 27 Silver bracelet, Washington DC, Dumbarton Oaks Collection, (Acc. no. 59.53)

Here the hoop is decorated with three relief medallions, each decorated with a banded cross with four volute palmettes. The presence of the cross places it in the sphere of purely amuletic jewellery. The other bracelet has bosses decorated with palmette interlaces and arabesques in niello on a silver ground.⁶¹

Although these bracelets of the 11th to 12th century are devoid of opulence and offer little information regarding the diversity of decoration, we should note that bracelets overall, and those included in this short article, constitute a particularly interesting *corpus* of jewellery, which has given us exquisite examples of superb art, as well as ample ground for deliberation on problems.

Notes

- 1 W.F. Volbach, *Early Christian Art*, London, 1961, pls 41–3.
- 2 K. Weitzmann (ed.), *Age of Spirituality: Late Antique and Early Christian Art, Third to Seventh Century*, New York, 1979, nos 165–6.
- 3 See for example the *situla* with six deities, *ibid.*, no. 118.
- 4 *Ibid.*, no. 130.
- 5 *Trésors d'orfèvrerie gallo-romains* (Exh. cat.), Paris, 1989, no. 224.
- 6 Weitzmann (n. 2), 475–83, nos 425–33.
- 7 Cf. a necklace with coin pendants: T. Hackens and R. Winkes (eds), *Gold Jewelry: Craft, Style and Meaning from Mycenae to Constantinople*, Louvain-la-Neuve, 1983, no. 36.
- 8 Cf. the central piece of a diadem in the Benaki Museum: *Ελληνικά Κοσμήματα, Μουσείο Μπενάκη*, Athens, 1999, no. 68 as well as the snake bracelets nos 88, 89, 90 and the bracelets nos 56 and 57.
- 9 M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval*



Plate 29 Silver bracelet, Athens, Benaki Museum (11457)

- Antiquities in the Dumbarton Oaks Collection, Vol. 2: Jewellery, Enamels, and Art of the Migration Period*, Washington DC, 1965, no. 47.
- 10 Stephen Zwirn in his lecture 'Out of the seventh century: where does some Byzantine jewellery belong?', given at the British Museum Byzantine Seminar on 'Intelligible Beauty: Recent Research on Byzantine Jewellery', advanced the theory that the bracelet is much older.
- 11 A. Yeroulanou, *Diatrita: pierced-work gold jewellery from the 3rd to the 7th century*, Athens, 1999, no. 232, fig. 91.
- 12 New York, The Metropolitan Museum of Art, Inv. no. 52.76.1; *ibid.*, 233, fig. 92. **See Baldini Lippolis, this volume, Pl. 17.**
- 13 For one example, see a bracelet in the Benaki Museum: *Ελληνικά Κοσμήματα* (n. 8), no. 103.
- 14 Weitzmann (n. 2), no. 282.
- 15 C. Johns and T. Potter, *The Thetford Treasure*, London, 1983, pl. 3b, no. 26.
- 16 J. Heurgon, *Le Tresor de Ténès*, Paris, 1958, 47.2, pl. V, 4.
- 17 E. Kypraiou (ed.), *Το Ελληνικό Κόσμημα, 6000 χρόνια παράδοση*, Κατ. Εκθ. Υπ. Πολιτισμού, Thessalonika, 1997/8, nos 172, 173, 243, 244, 255.
- 18 É. Coche de la Ferté, *Collection Hélène Stathatos: les objets byzantins et post byzantins*, Limoges, 1957, nos 14–15, 32, pls III, V.
- 19 Ross (n. 9), no. 46.
- 20 W. Dennison, *A Gold Treasure of the Late Roman Period* (University of Michigan Studies in East Christian and Roman Art), New York, 1918, nos 30, 31.
- 21 *Ibid.*, no. 34.
- 22 C. Lepage, 'Les bracelets de luxe romains et byzantins du II^e au V^{ie} siècle: Etude de la forme et de la structure', *Cahiers Archéologiques* 21 (1971), 1–23, at 5–7, fig. 10.
- 23 A. Gonosová and C. Kondoleon, *Art of Late Rome and Byzantium in the Virginia Museum of Fine Arts*, The Virginia Museum of Fine Arts, Richmond, 1994, nos 13–15.
- 24 Kypraiou (n. 17), nos 225 and 231.
- 25 Yeroulanou (n. 11), nos 197, 198.
- 26 *Ibid.*, no. 113.
- 27 *Ibid.*, no. 210.
- 28 I. Baldini Lippolis, *L'oreficeria nell'impero di Costantinopoli tra IV e VII secolo*, Bari, 1999, 184, 2.VI.3.C1.
- 29 See Yeroulanou (n. 11), 164–9.
- 30 C. Johns, *The Jewellery of Roman Britain*, London, 1996, 116–17.
- 31 B. Deppert-Lippitz, 'A Group of Late Antique Jewellery in The Getty Museum', *Studia Varia from The J. Paul Getty Museum* 1 (1993), 107–40, at 120–1, fig. 12 a–c.
- 32 D. Buckton, 'The beauty of holiness: *Opus interrabile* from a Late Antique workshop', *Jewellery Studies* 1 (1983–84), 15–19, at 15–18, figs 6–7.
- 33 Heurgon (n. 16), 48–50, fig. 16, pl. V.1 and XXV.
- 34 Johns (n. 30), fig. 5.31.
- 35 Yeroulanou (n. 11), no. 201.
- 36 Lepage (n. 22), 10–12, figs 17–18.
- 37 *Ibid.*, 12–13, figs 20–1.
- 38 Yeroulanou (n. 11), no. 205.
- 39 Buckton (n. 32), 16 and 19, no. 9, fig. 7.
- 40 Gonosová and Kondoleon (n. 23), no. 16.
- 41 Yeroulanou (n. 11), nos 207–8.
- 42 J. Durand (ed.), *Byzance. L'art byzantin dans les collections publiques françaises* (Exh. cat., Musée du Louvre), Paris, no. 75.
- 43 Deppert-Lippitz (n. 31), 114–17, no. 4, fig. 6a–b.
- 44 Lepage (n. 22), 17, fig. 28.
- 45 Durand (n. 42), no. 76.
- 46 Dennison (n. 20), nos 26–7.
- 47 D. Buckton (ed.), *Byzantium: Treasures of Byzantine Art and Culture from British Collections* (Exh. cat., British Museum), London, 1994, no. 99.
- 48 *Ελληνικά Κοσμήματα* (n. 8), no. 113.
- 49 Ross (n. 9), no. 2A.
- 50 A. and J. Stylianou, *The Treasures of Lambousa*, Nicosia, 1969, 55, fig. 43.
- 51 Dennison (n. 20), nos 32–3.
- 52 Weitzmann (n. 2), no. 299.
- 53 Dennison (n. 20), nos 28–9.
- 54 Kypraiou (n. 17), no. 275.
- 55 *Ibid.*, no. 282.
- 56 Ross (n. 9), no. 108.
- 57 Kypraiou (n. 17), no. 284.
- 58 Gonosová and Kondoleon (n. 23), no. 18.
- 59 Kypraiou (n. 17), no. 285.
- 60 *Ibid.*, no. 126.
- 61 *Ibid.*, no. 127.

Byzantine Jewellery? Amethyst Beads in East and West during the Early Byzantine Period

Jörg Drauschke

For Prof. Dr Heiko Steuer on the occasion of his 70th birthday

Precious stones are an integral part of Byzantine jewellery throughout the life of Byzantine culture. This contribution focuses on the time-span between the 5th and the 7th centuries; thus a snapshot from the early Byzantine period. It saw a widespread use of gemstones not only within the Byzantine Empire, but also beyond its borders, for example in the Germanic kingdoms of the West where amethyst and amethyst beads were highly appreciated. These are often found on necklaces from women's graves, particularly in the regions inhabited by Franks, Alamanni and Bavarians, but they are also known from Anglo-Saxon England, Langobardic Italy and, of course, from Byzantine jewellery found throughout the Mediterranean. This paper presents some considerations on the appearance of amethyst within Byzantine jewellery, about the possible deposits that were exploited for the raw, mineral material, and about the connections between East and West that are clearly visible in the archaeological record.¹

Precious stones in Antiquity and the Early Byzantine period and the problems of identification

For the analysis of the widespread distribution of amethyst beads it is necessary to show briefly which gemstones were used in the Byzantine Empire, which minerals can be identified with these gemstones according to modern nomenclature, and especially how amethyst was perceived. Judging from pictorial representations the wearing of jewellery in the Mediterranean world seems to have increased from the 4th century onwards.² Pearls and precious stones were mounted on individual pieces in the form of inlays and pendants. Good examples are the jewelled collars which also appear from the 4th century onwards. According to Stolz, collars with pendants are absent in private contexts from the 5th century onwards and only appear in mythological and Christian illustrations, and of course in depictions of members of the emperor's family.³ Despite the criticisms of several ecclesiastic dignitaries, decoration with precious stones became an important attribute of imperial dress, which was also charged with Christian symbolism. For example, just as the celestial Jerusalem was also decorated with gold, gemstones and pearls, the emperor's dress was compared with the breastplate of the Jewish high priest that was mounted with 12 precious stones.⁴ To prevent increasing imitation of this richly decorated clothing, edicts were enacted which tried to restrict the use of certain gemstones to the emperor's family.⁵

Regardless, precious stones remained in use for many different objects such as bracelets, earrings, finger-rings, and necklaces. Unfortunately, modern descriptions of the particular mineral used are rarely based on a mineralogical analysis. Certainly, in many cases minerals can be

distinguished by their external appearance. Differences in colour and crystal shape are clear between, for example, emerald (green), rock crystal (colourless), lapis lazuli (deep blue), aquamarine (light blue - colourless), garnet (deep red), quartz (white), and chalcedony as well as sardonyx (different colours). These can be distinguished from sapphire and amethyst, which are respectively normally blue and purple. But depending on the particular deposit, the colour can vary and it can be difficult to differentiate between sapphire and amethyst. Sometimes these difficulties increase when it is necessary to draw conclusions from published illustrations, because the colour-rendering can also vary a great deal. In addition, not all droplet-shaped beads with a purple or blue colour are minerals and precious stones, as can be shown by the beads from Menouthis, which are of purple glass.⁶

We must be aware of the fact that colour was the most important characteristic of a precious stone in Antiquity due to the lack of a classification based on a knowledge of the chemical components. Given the great number of gemstones with similar or even identical colours this kind of classification led inevitably to identical appellations for different minerals. Therefore it remains unclear in some cases which gemstones were meant in terms of modern nomenclature.⁷ A good example of these difficulties is the famous 'carbunculus'. Pliny the Elder describes in book 37 of his *Natural History* the fiery red colour and distinguishes four main types: *indicus*, *garamanticus* (also called *carchedonius*), *aethiopicus* and *alabandicus*. It is hard to decide which red mineral mentioned by Pliny is identical to the gemstones classified by the modern system and called today red garnet, ruby, jacinth (hyacinth), and spinel.⁸ We must assume that all these minerals were in use in Antiquity and later; at least Cosmas Indicopleustes was still aware of the *carbunculus* in the first half of the 6th century.⁹

The amethyst is partly affected by these circumstances. Pliny's description of amethysts (*amethysti*) is very detailed and specifies the places of deposits (see below) as well as the brilliant, purple colour, almost that of wine, which could be an explanation for the name. Pliny classifies the mineral into five kinds according to its colour, from deep purple to nearly colourless, and mentions some of its falsely ascribed attributes: that amethyst prevents drunkenness, protects against spells, helps while approaching a king as a suppliant, and wards off hail and locusts.¹⁰ Just as Pliny relied partly on the gemmological study by Theophrastus (c. 371–287 BC),¹¹ so Isidore of Seville (560–636) partly based his work on Pliny's. For gemstones he tried to establish his own system depending on their colours. According to him, the amethyst (*amethystus*) ranks first of the purple minerals, owes its name to its similarities with wine and can be divided into five types.¹²

Perceptions of amethyst remain fixed over a long period as

can be seen in the work of the Byzantine scholar Michael Psellos (c. 1017–78) who wrote a short piece about the mineral ἀμέθυστος.¹³ Perhaps this tradition can be explained by the fact that amethyst was included among the gemstones of the Jewish high priest's breastplate from the first Greek translation of Exodus 28:17–20, dated around 300 BC (Septuagint), and was repeated in the Latin translation (Vulgate).¹⁴

With regard to the mineral's description, it is almost certain that the stone named amethyst in Antiquity is identical with the mineral today called amethyst, even if the attributes changed and were reinterpreted in a Christian perspective.¹⁵ But a different name is also considered to have referred to amethyst crystals in Antiquity, that is *hyacinthos*. In Pliny's work this gemstone is clearly differentiated from the amethyst, although he admits to some similarities. But all in all, the much paler colour, reminiscent of the tint of the hyacinth flower, permitted a separation between the two. This distinction is repeated in the 6th century by Isidore of Seville¹⁶ and can also be found in the work of Claudianus in his description of the dress of the Emperor Honorius (395–423) adorned with emeralds, amethysts and hyacinths, the latter marked by a blue colour.¹⁷

The information presented by Cosmas Indicopleustes cannot be interpreted as totally reliable. Cosmas does not explicitly mention amethyst as a precious stone mined in Sri Lanka and traded from there to the west, but only names the *hyacinthus*.¹⁸ He also describes a large and fiery red hyacinth crystal, stored in a temple in Sri Lanka.¹⁹ This has been interpreted as an amethyst, but also – and, given the described colour, more convincingly – as a ruby.²⁰ No distinctions are drawn either in paragraph 11.12 from the *Codex Iustinianus*, where it is forbidden to decorate belts, saddles and bridles with emeralds and hyacinths, but without any detailed description.²¹ Nevertheless an understanding of the differences between the minerals in question survived into the Middle Byzantine period, for Michael Psellos describes the Ὑάκινθος separately as a gemstone of a marine colour.²²

In the light of these sources it is no surprise that the identification of the *hyacinthus* is anything but clear. The stones in question include sapphire, amethyst, ruby and the stone still called today jacinth (hyacinth). According to Hunger²³ the ancient term *hyacinthus* must be understood as an expression for amethyst, whereas Lüschen, Friess and Zwickel²⁴ identify it with the sapphire, but Friess leaves open the possibility that sometimes this term was also assigned to a more purple type, namely the amethyst. Greiff argues that it was attributed to the mineral called hyacinth according to its modern classification.²⁵ Commenting on the text of Cosmas Indicopleustes, Weerakkody concedes that 'we do not know whether by this word [*hyacinthus*] Cosmas meant the jacinth, the sapphire, or the amethyst: he may even have used the word in a general sense to mean 'precious stones'.²⁶ All we can acknowledge is the awareness in Antiquity of the existence of a mineral called amethyst and a different gemstone called *hyacinthus* with a bluer colour tinging towards light purple. It seems that this knowledge was still extant during the Middle Ages. Regarding the recorded descriptions and especially the mentioned colours, it is, in my opinion, most convincing to identify the *hyacinthus* with the modern gemstone sapphire. Nonetheless it cannot be excluded that in Antiquity some pale

purple minerals, which would be classified as amethyst according to modern nomenclature, were subsumed under the term *hyacinthus*, because it was not possible to distinguish between them. This seems to be confirmed by the fact that nearly all droplet-shaped mineral beads known from Late Antique and Early Byzantine jewellery are made of sapphire and amethyst. In addition an antique name for the frequently used sapphire is missing. Of course the precious stone *sappirus/sapphirus* is mentioned, for example by both Pliny and Isidore,²⁷ but given the description of its deep blue colour, opaque crystals and the sometimes visible golden inclusions, it is widely accepted to identify the ancient *sappirus* as a general term for blue stones, and perhaps particularly for lapis lazuli which was used at least until the Late Middle Ages.²⁸

Scientific research on the origins of ancient gemstones and the possible provenance of amethyst

The preceding overview of the ancient classification of precious stones was necessary to show what knowledge existed about the minerals frequently used in Byzantine jewellery. A survey of the jewellery by Baldini Lippolis has shown that in fact – following modern classifications – sardonyx, emerald, sapphire, amethyst, chalcedony, rock crystal, quartz, lapis lazuli, and aquamarine were the favourite types of precious stones for necklaces, followed by beads made from glass paste, pearls and beads made from other types of stone.²⁹ In this context red garnet is very rarely mentioned, but it was, for example, frequently used for Mediterranean disc-brooches dating from the 5th century.³⁰ Today we know that the amethyst is a purple variety of quartz and that its colour is generated by iron components. Amethyst deposits are widely spread over the world, with the most important ones situated in South America, especially in Brazil and Uruguay.³¹ Of course, the ancient sources are of greater interest for our purpose. Pliny specified many deposits for the above mentioned sardonyx and/or onyx, lapis lazuli, and emerald, but the places of origin between India and the eastern Mediterranean are often repeated and therefore not particularly reliable.³² Pliny lists amethyst deposits in India, around Petra in Jordan, Armenia, Egypt and Asia Minor, Cyprus and Thasos.³³ For Egypt, at least, traces of mining prove the extraction of the mineral in Roman times.³⁴ It is typical of Pliny's work that deposits in the West, especially in the then new Roman provinces in north-west Europe, are hardly mentioned. A study of the literature from the time before large overseas sources of raw material were discovered reflects well the pre-modern conditions of gem supply. According to this, deposits of amethyst were also known from Spain and the Pyrenees, in Ireland, in the alpine regions of Switzerland, south Germany and north Italy, Hungary, Bohemia, Sweden, Saxonia, the Auvergne, as well as Idar-Oberstein and other European areas.³⁵

Nevertheless an oriental provenance for amethyst is very probable given the recent research on the origins of red garnets in the 5th until the 7th century. Greiff analysed several garnet inlays from Merovingian pieces of jewellery and compared the results with the chemical composition of the over 70 garnet sources known today. The clear result was that the most similar deposits were to be found in India.³⁶ Later analyses by German and French teams confirmed these results, but also added

interesting aspects. It was possible to distinguish between different garnet sources: gemstones from the 5th and 6th centuries could be connected with sources in India and Sri Lanka, whereas objects dating to the second half of the 7th century were decorated with garnets from Bohemia. This was first shown by the German team assembled by Quast and refined by French colleagues who were able to divide the oriental garnets into three and the Bohemian ones into two kinds. The first appearance of Bohemian garnet could be dated to the time around 600, but minerals from Asiatic sources continued in use for several decades.³⁷ Generally a change of sources is clearly visible, but this is not the place to speculate about proposed explanations.³⁸

Only a few modern studies of Byzantine jewellery include mineralogical analyses. One deals with the materials used for the collar from the so-called Assiût treasure.³⁹ With the help of different analytical methods and characteristics – refractive indices, inclusions, and specific light effects ('asterism') – both the original and replaced crystals could be identified. Both the pendants and the inlays on the ornamented plaques are sapphires; only one pendant is an amethyst, and this perhaps is a modern replacement. A comparison with older publications of the collar, where one can find descriptions of aquamarine or rock crystal, shows the importance of modern scientific analyses. Moreover the identification of characteristic inclusions – so-called healing-fissures – in the sapphire droplets suggested Sri Lanka as a place of origin, thus the same provenance as some red garnets. The sapphire beads found in Berenice, the famous harbour and trading port on the Red Sea coast, where many exotic imports from southern Asia were found during the recent excavations, point in the same direction.⁴⁰

To date no attempts have been made to identify exploited amethyst deposits with the help of scientific methods, although there is a possibility of success for such a research programme. The differences between sources with regard to the main chemical components are not decisive, but with the help of trace element analysis and specific isotopes it might be possible to obtain some results, particularly as amethyst deposits are

not as numerous, for example, as garnet deposits. These methods have been applied successfully to carnelian beads from western India and West Africa.⁴¹ Even though the origin of the amethysts used for Byzantine necklaces and also for necklaces in the West has not yet been scientifically confirmed, it is most probable in my opinion – given the written sources and the results for red garnets and sapphires – that the sources were located in southern Asia, *i.e.* India and/or Sri Lanka, or in the regions of Egypt, Ethiopia, the Near East, Asia Minor, and Greece. At the very least the production of beads from the crystal raw material must be sought in the Byzantine Empire. Not only does the appearance of numerous mineral beads and inlays on Byzantine jewellery point in this direction, but so do the remains of workshops where the raw mineral material has been excavated, for example in the city of Alexandria.⁴² Mineral raw materials (but not amethyst) are also amongst the finds from the recent excavations at the Crypta Balbi in Rome.⁴³ Working on gemstones was not restricted to the heartland of the Byzantine Empire.

Amethyst beads and pendants in Mediterranean and Byzantine jewellery

Typical droplet-shaped amethyst beads are in most cases components of Byzantine necklaces and earrings. But especially for the early period not many jewels with amethyst can be cited. A 4th- to 5th-century diadem, now in the Walters Art Museum, Baltimore, bears amethyst cabochons.⁴⁴ Oval amethysts can also be found on the plaques of an openwork necklace and an openwork bracelet from the second half and last third of the 4th century in the Dumbarton Oaks Collection.⁴⁵ Similar amethyst inlays remain rare in later centuries. An exception is the collar that is believed to belong to the Assiût treasure, today in the Antikensammlung, Berlin.⁴⁶

Droplet-shaped amethyst beads and pendants seem to appear later, and then were widely used in the 6th and 7th centuries. Many examples are known from Egypt, but were recorded during old excavations, so a chronological context is lacking.⁴⁷ Within the eastern Mediterranean area three necklaces are known from treasures probably buried in



Plate 1 Necklace with 13 amethyst beads, Washington DC, Dumbarton Oaks Collection, Inv. no. 59.61 (not full-scale)



Plate 2 Necklace from Lambousa (Cyprus). Nicosia, Cyprus Museum, Inv. no. J 429 (not full-scale)

Constantinople at the end of the 6th and during the 7th century (today in the Dumbarton Oaks Collection in Washington DC) which feature amethyst beads (Pl. 1).⁴⁸ Three further necklaces with similar beads must be added which belong to the collection of the Cyprus Museum in Nicosia. At least two of them were certainly found in Lambousa – one (Pl. 2) part of treasure 1 brought to light in 1883 and probably buried in 653/54 – and a third one is possibly of the same origin.⁴⁹ Looking at the Byzantine Balkan provinces the collar from Sadovec, Sadovsko Kale on the Danubian frontier must be added, dated by its context to the 6th century. The five amethyst beads were parts of single pendants of which the collar was composed.⁵⁰

In the western Mediterranean a few Byzantine necklaces are known from Sicily. The treasure of Pantalica, most probably hidden during the second half of the 7th century, was found in 1903 and contained at least five of them, but only parts of them survive in the Archaeological Museum of Syracuse and in a private collection in the USA. Amethyst beads are mentioned in the descriptions of the necklaces, but only two of the illustrations feature droplet-shaped beads which could be compared with typical amethyst beads.⁵¹ A further necklace with similar amethyst beads formed part of a burial in Nissoria (Sicily) from the end of the 6th century.⁵² In addition Baldini Lippolis recently presented a necklace from a treasure found in Campobello di Mazara (Sicily) with amethyst pendants, presumably buried at the end of the 7th or in the 8th century (see Baldini Lippolis, this volume, Pl. 23). A chain found at the Forum Romanum in Rome and dated to the end of the 6th and the 7th centuries was identified as a bracelet and also included comparable beads.⁵³

The *corpus* of necklaces and collars can be completed by pieces from private and museum collections, without any context or origin. A very interesting, because probably very early, example is the necklace from the George Ortiz Collection

in Geneva, dated from the second half of the 5th to the first half of the 6th century.⁵⁴ Droplet-shaped amethyst beads are also components of necklaces in the Benaki Museum, Athens,⁵⁵ the Skulpturensammlung und Museum für Byzantinische Kunst, Berlin,⁵⁶ the Indiana University Art Museum, Bloomington,⁵⁷ the Field Museum of Natural History, Chicago,⁵⁸ the Metropolitan Museum of Art, New York,⁵⁹ and the Walters Art Museum, Baltimore.⁶⁰ A necklace in a private collection in Munich was perhaps recently assembled from ancient pieces.⁶¹ In general the above mentioned pieces all belong to the 6th and 7th centuries.

Beyond the borders of the Byzantine Empire, but also from a Mediterranean context, are some well-known collars which were excavated in women's graves within Langobardic cemeteries in Italy. The Byzantine impact on the dress fashions of the Langobardic invaders is clearly visible, so it is no surprise that finds of amethyst beads are very frequent: at the cemetery of Nocera Umbra, for example, they have been found in at least 19 female graves.⁶² They cover a period from the last third of the 6th up to the second half of the 7th century. Some very prominent examples are known from graves 10, 17, 69, and 95.⁶³

The second main group of Byzantine jewellery with droplet-shaped amethyst beads consists of earrings. Their distribution is very similar to the necklaces mentioned above. From Menouthis in Egypt two pendants were recorded which certainly belonged to an earring.⁶⁴ From Beit Jibrin (Palestine) two pairs of gold earrings with similar amethyst beads are known from a burial. Unfortunately the exact grave context has been lost, but the earrings themselves belong to the 6th and 7th centuries.⁶⁵ One pair of earrings and one single earring formed part of the first Cyprus treasure from Lambousa,⁶⁶ whereas the second treasure, unearthed in 1903 and presumably buried at the same time as the first, around 653/54, contained a pair of gold earrings.⁶⁷ They all feature droplet-shaped amethyst beads. From Constantinople itself no certain examples are known. One piece from the Walters Art Museum in Baltimore could also have an origin in southern Spain.⁶⁸ A 6th-century pendant, which most probably belonged to an earring, has been found in Sadovec.⁶⁹

Earrings with amethyst pendants are also known from places in the western Mediterranean, for example, in Italy. In Patti Marina (Sicily) a grave was found in 1973 with a pair of gold earrings dating from the second half of the 6th century.⁷⁰ Grave 57 from Arezzo, Duomo Vecchio, can probably be dated slightly later to the end of the 6th or the beginning of 7th century and it too contained a pair of gold earrings (Pl. 3).⁷¹ From Luni (Liguria) comes a pair of gold earrings which Baldini Lippolis has suggested belong to a rather earlier type of the 5th or 6th century.⁷² Very early Byzantine examples with amethyst pendants, with regard to both the eastern and western Mediterranean, are known from two graves in Henchir Kasbat (*Thuburbo maius*) and Mactar (*Mactaris*) in modern Tunisia. A pair of gold earrings was found in 1912 in a woman's grave within the basilica of Henchir Kasbat, whereas the gold earring from Mactar came from a similar grave associated with the local church.⁷³ In spite of doubts as to whether women from the Vandal ruling class were buried here, the earrings are a perfect example of the Byzantine style that was obligatory for all Mediterranean elites and they can be dated on the basis of the grave contexts to around the mid- 5th century.

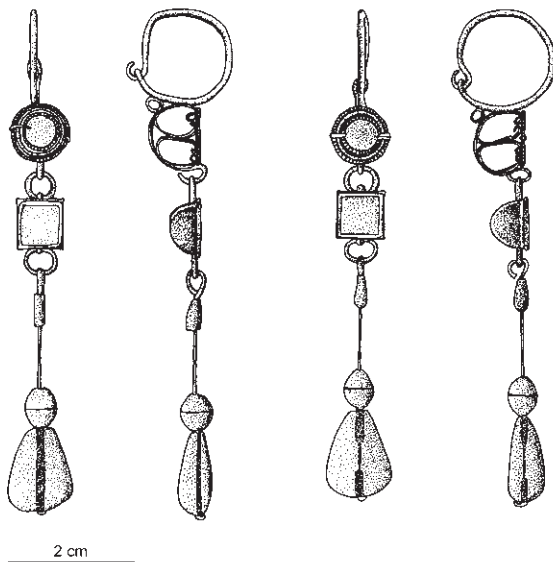


Plate 3 Pair of gold earrings with amethyst beads from Grave 57 from Arezzo, Duomo Vecchio, Italy

Again, several earrings from museum and private collections must be added to complete the picture. They are generally from the 6th and 7th centuries and include a single earring, acquired in 1943, in the Walters Art Museum, Baltimore.⁷⁴ Further pairs of gold earrings with amethyst pendants are in the collections of the Museo del Bargello, Florence,⁷⁵ the Ashmolean Museum, Oxford (Pl. 4),⁷⁶ and the Schmuckmuseum, Pforzheim.⁷⁷

From Langobardic cemeteries in Italy two very well-known pairs of gold earrings with three pendants must be mentioned. They were found in grave 7 at Civezzano and grave S at Castel Trosino, and date respectively to around 600 and the early 7th century.⁷⁸

At the end of this inventory of mainly droplet-shaped amethyst beads from the Mediterranean some finds must be mentioned whose functions are unknown. A gold droplet-shaped pendant with a central amethyst bead, found in Egypt and now in the British Museum in London,⁷⁹ and a pendant with an amethyst bead from the Byzantine and Christian Museum in Athens⁸⁰ were probably parts of earrings or necklaces. Similar droplet-shaped amethyst beads were also used as pendants for jewels from the famous treasure of Guarrazar in Spain. Including only those pieces found today at the Museo Arqueológico Nacional and the Real América del Palacio Nacional in Madrid, 23 gemstones could be identified as amethysts, whereas 245 sapphires, 14 emeralds and 185 pearls were recorded in addition to other stones. Amethysts are not only frequently used as pendants on crosses, like the example in the Museo Arqueológico Nacional, and a similar one in the Musée National des Thermes et de Hôtel de Cluny, but also in crowns like the 'corona de estructura calada de doce tramos', also in the Cluny collections. Gemmological characteristics hint at a south Asian origin for the sapphires – like those from the Assiût collar – but PIXE-analyses of the emeralds suggest an alpine source for these gemstones.⁸¹ As the burial of the treasure probably occurred at the end of the 7th or the early 8th century (the invasion of the Arabs took place in 711), one must assume a longer period of time (perhaps more than 100 years) for the manufacture of the different objects. Therefore the fact that the gemstones originate from different



Plate 4 Pair of earrings with amethyst pendants. Oxford, Ashmolean Museum, Inv. no. AN 1909.822

sources should not come as a surprise.

In summary one can say that amethyst beads typically of droplet shape were used quite frequently – but not as often as sapphires or emeralds – especially for necklaces, collars and earrings throughout the Mediterranean in the 6th and 7th centuries. Earlier pieces are hard to identify and it seems that a common use of this kind of pendant began at least in the 5th century and saw a widespread distribution from the 6th century onwards.

The 'barbarian' perspective: amethyst beads from the eastern Merovingian Kingdom

North and west of the Alps amethyst beads have been found in very large numbers within the borders of the Merovingian Kingdom, in particular in the northern and eastern parts belonging to the 'row-grave-culture'. This culture is characterised by large 'row-grave' cemeteries, where the dead were sometimes buried with opulent grave goods. The frequently recorded necklaces in female graves, which are assumed to have been part of daily clothing, incorporated amethyst beads in surprisingly high numbers. They are generally interpreted as Mediterranean⁸² or particularly Italian imports.⁸³ Their occasional combination with gold pendants has even led to the suggestion that whole collars were imported from Italy,⁸⁴ but this assumption cannot be extended to all the beads found in the North. Schulze-Dörrlamm tried to explain the increasing use of amethyst beads from the end of the 6th century onwards as an imitation of Byzantine court costume as seen on the well-known Theodora mosaic panel in the church of San Vitale in Ravenna.⁸⁵ Another point must be made here: in general amethyst beads are small, almond- or droplet-shaped and have a strong colour (Pl. 5). It has been recognised that – beginning from the second half of the 7th century – some crystals became longer and pale to colourless (Pl. 6), which has been explained as evidence of a change of raw material, perhaps the result of falling back on local resources.⁸⁶ So the question arises as to whether the beads from the area north of the Alps can be considered as Mediterranean, perhaps Byzantine products, and whether a change of raw material can really be determined for the 7th century.



Plate 5 Necklace from grave 10 from Lahr-Burgheim (Germany) with typical droplet shaped amethyst beads (not to scale)

To answer these questions I analysed the finds of an area which covers southern Germany and adjacent regions (Pl. 7). It was inhabited during the 6th and 7th centuries by Franks, Alamanni and Bavarians. It is generally accepted that amethyst beads from female 'row graves' are to be dated between approximately 565/70 to 620/30,⁸⁷ but this time span, as demonstrated by the chronological analyses of Roth and Theune some years ago, has to be substantially extended.⁸⁸ Within the designated area the first beads appear around the middle of the 6th century, reach an amazingly high number of finds around 600 and are still known from graves at the end of the Merovingian period around 700.

Except as beads within collars amethysts are used in only two further types of jewellery. The semi-precious stone has been identified only twice as inlays on 7th-century disc-brooches.⁸⁹ In addition three pairs of earrings from three different graves were equipped with amethyst pendants. These graves can be dated to the time around and after 700, so we might detect traces of a particular fashion in this period.⁹⁰

Altogether the collection from south Germany includes at least 1005 amethyst beads from 383 find-contexts, in addition to which a higher number of archaeologically recorded pieces must be estimated as the exact numbers of beads are not known from some contexts. It was possible to define a closer dating for 287 contexts with 808 amethysts (Pl. 8).⁹¹ Samples of the phase around the middle of the 6th century are rare, with 30 beads from 16 graves. Only one burial can be clearly dated before 550, whereas the rest of the graves are distributed mainly in the west of the area in question. In the following time phase at the end of the 6th century the number of graves with amethyst beads rises substantially to 95, and at the same time their distribution expands to include the entire southern German region, a pattern which remains unaltered in the course of the following 7th century. A comparison of the distribution of amethyst in the 6th and 7th centuries shows that they are well represented in all micro-regions and cover all areas which are thought to have been inhabited during this time. The number of datable finds decreases from 72 in the beginning, to 38 and 27 in the middle of the 7th century, but increases again to 40 around 700. The number of amethyst beads repeats the trend of the contexts. The high esteem in which these beads were held from the end of the 6th century can be also demonstrated by the average number of pieces per grave, being 2.6 at the beginning and reaching a maximum of 3.2 beads per grave around 700.⁹²

Regarding the shape of amethyst beads, the designations 'almond-shaped' and 'droplet-shaped' dominate in the literature, sometimes supplemented by the description 'flat'. 'Spindle-shaped', 'round' or 'discoïd' are very rarely used terms. A comparison of the pieces reveals that behind these different descriptions identical or at least very similar profiles are hidden. Generally amethyst beads are characterised by a



Plate 6 Necklace from grave 32 from Bruckmühl (Germany) with partly pale amethyst beads of a differing shape

Plate 7 Distribution of amethyst beads from the 6th and 7th centuries in southern Germany and adjacent areas

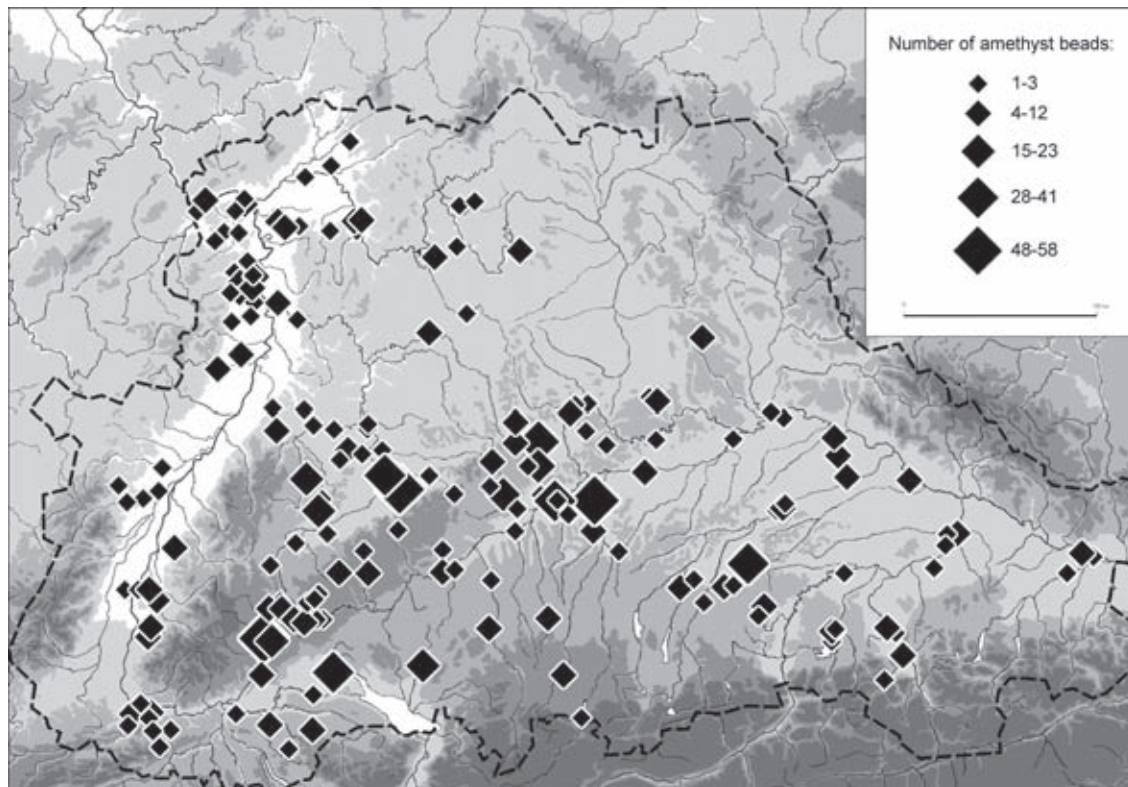


Plate 8 Chronological development of the number of amethyst beads and the graves that contained amethyst beads

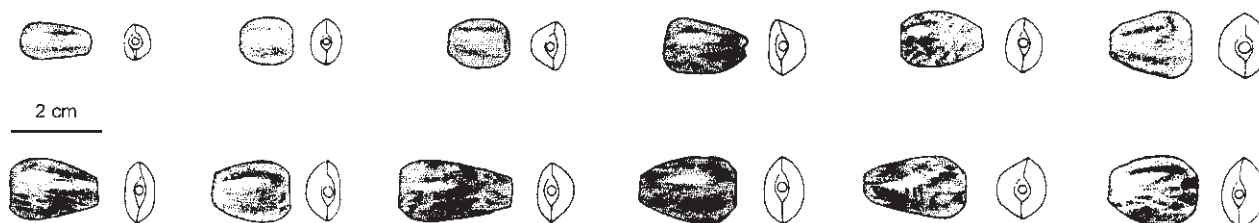
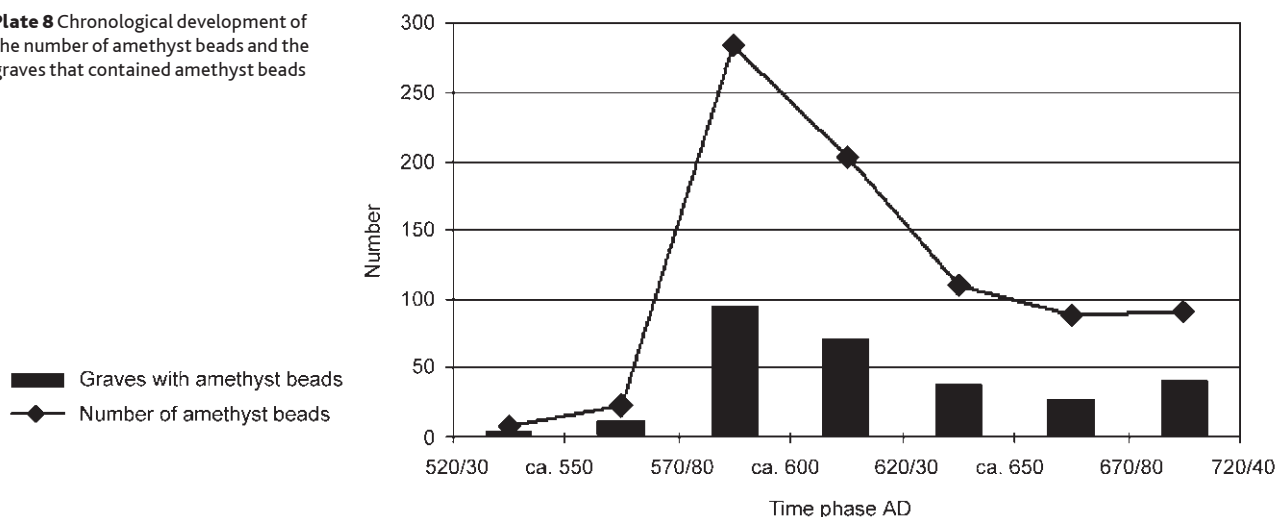


Plate 9 Amethyst beads from grave 30 from Schleithem, Church of Sta Maria (Switzerland)

contour similar to a drop or an almond, whereby the largest width lies in the centre or is shifted to one end (Pl. 9). The differences between 'pillow-shaped' and 'almond/tear-drop shaped' beads cannot be determined exactly, and it is not possible to make a clear distinction. The cross-section of the beads is mostly pointed, whereas one side can be more strongly curved than the other and sometimes bears an arris (sharp

ridge). The sides are sharp edged-polished to rounded. The width of the beads increases proportionally to the length, but rarely exceeds 1.5cm, so that the length to width relationship on the longer pieces shifts. Only the bead length remains as a reliable and examinable size,⁹³ which was always consulted as the main criterion for the differentiation of the beads as mentioned above. In order to study the beads' chronological

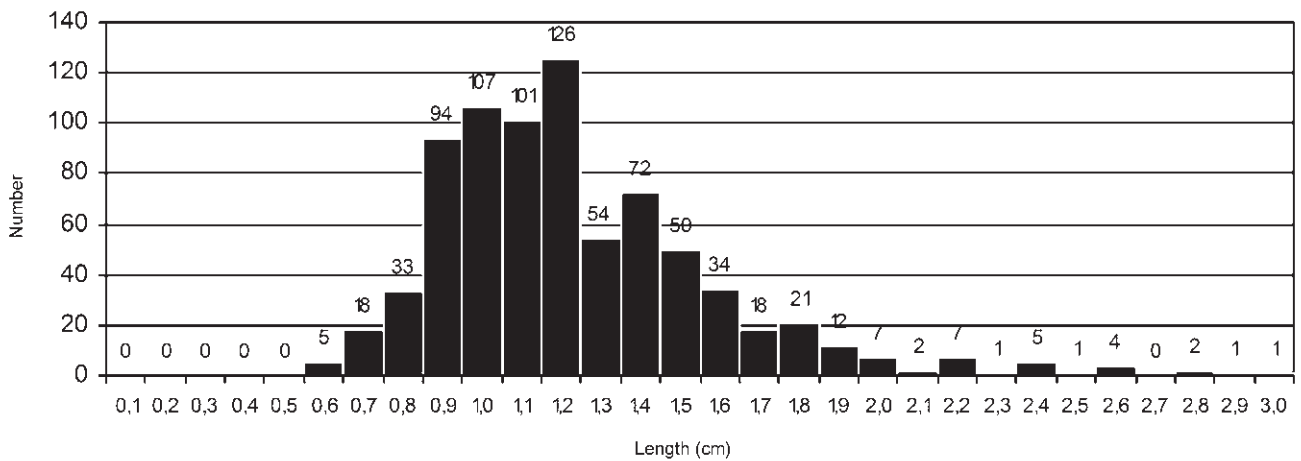


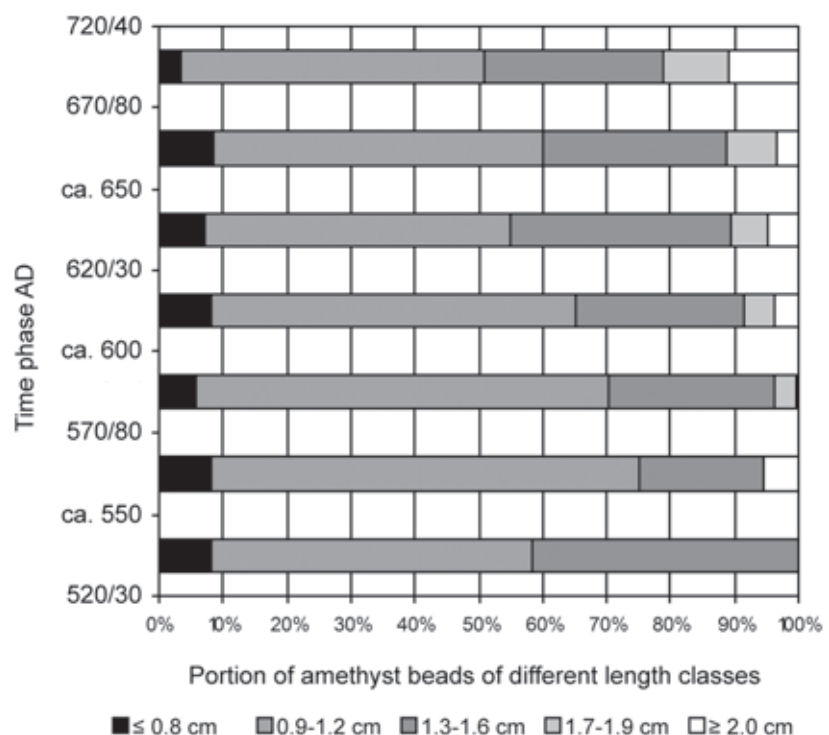
Plate 10 Number of different lengths of amethyst beads

development, the length of 776 pieces was measured, whereby clear tendencies could be detected (**Pl. 10**), which were summarised into five groups: Group 1 – beads of 0.8cm in length or smaller (numerically insignificant); Group 2 – beads of between 0.9cm and 1.2cm in length (much the largest group, comprising 428 examples); Groups 3 and 4 of between 1.3cm and 1.6cm and 1.7cm and 1.9cm in length respectively; Group 5 – beads of 2cm or more in length (rare). It is evident that rather long beads must be understood as exceptions over the whole period.

The groups of different spans were combined into the five groups above, and their frequency and percentage within the time phases from the middle of the 6th to the end of the 7th century were examined: 672 beads from 229 find-contexts were available.⁹⁴ The frequency of the individual groups and their percentage in the different time phases is informative (**Pl. 11**). The otherwise insignificant small beads (Group 1) were in use up to the time around 700, whereas the beads of Groups 2 and 3 are the most frequent ones. Their number decreases continuously over the whole time span, but always forms the

largest percentage (70%–90%) of all beads. The large beads of Groups 4 and 5 appear during the second half of the 6th century, but only with a percentage of 10%–12% and only around 700 do they reach somewhat more than 20%. The results can be summarised as follows: over the whole period beads of a length from 0.9 to 1.6cm are the most popular, whereas smaller pieces remain infrequent, but were still in use in the period around 700. Beads starting from a length of 1.7cm are known from the end of the 6th century onwards, but mainly belong to the 7th century. Until the time around 700 they remain insignificant. As a result, the dating of amethyst beads according to their lengths remains a methodological problem and should be avoided. In addition, a sudden change in the deposit source for the amethyst raw minerals corresponding to the size of the beads is not visible within the material; but the existence of an alternative mineral source of raw stones, which supplied large crystals for the larger beads of the 7th century, being exploited during the same period cannot be ruled out. A regional preference for the larger beads of Groups 4 and 5 could not be detected.

Plate 11 Percentage of different length classes of amethyst beads during the 6th and 7th centuries



In addition it is important to emphasise that the decreasing, but still constant frequency of amethysts during the 7th century, shows clear differences to the red garnet from south Asia, falling out of use very quickly after 600 and being replaced by crystals from Bohemia (see above). In order to explain this situation, different scenarios are conceivable. If the sources of amethyst are not to be found in southern Asia, but in Egypt or elsewhere around the eastern Mediterranean, then the supply of the raw material must be seen separately and amethyst would not have been affected by circumstances which influenced the trade in red garnets. But if we assign a south Asian origin to amethyst – which is very probable due to the results concerning the origin not only of garnets, but also of several sapphires (see above) – and a break in the trade connections between south Asia and the Byzantine Empire around 600, caused by the Sasanian conquest of south Arabia and visible in the West because of the further absence of garnets,⁹⁵ then the diverging development of the gemstones used during the 7th century must be explained in a different way. Perhaps it will be possible in the near future to use scientific methods which help us to identify the deposits of the amethyst raw material. If the results prove India or Ceylon as the region of origin even for pieces of the 7th century, the absence of south Asian red garnet after 600 cannot be due to difficulties of supply. But it is also possible that a change of amethyst deposits can be detected that is not visible at the moment with regard to individual objects.

Amethyst beads in East and West

A comparison of amethyst beads from Merovingian contexts with those from the Mediterranean reveals several similarities: the identical droplet shape and use of the beads, the identical drilling technique and the more or less parallel origin for this kind of bead as a necklace ornament from the 6th century onwards. Of course, on Merovingian necklaces they were not worn as pendants and they were never strung on a gold chain link as was common in the Mediterranean. But this is no surprise considering the fact that Mediterranean (or Byzantine) jewels in the form of finished products are very rare in the archaeological material of the Merovingian realm.⁹⁶ Regarding the finds from the Byzantine Empire, the western Mediterranean and the eastern parts of the Merovingian Kingdom, I would conclude that the amethyst beads found in the region north of the Alps are imports from the Mediterranean, specifically the Byzantine Empire and that they arrived in the form of single beads, not attached to whole necklaces or collars. They show an unbroken production until the end of the 7th century, of course with less intensity at the end, whereas the higher percentage of bigger and paler beads may indicate the existence of a different source. They also show the close relations between East and West during this time. Amethyst beads are also very common in Anglo-Saxon graves in Great Britain, but they have different polished shapes and their average size is much larger than those from the Continent or Mediterranean area.⁹⁷ The question as to whether they are local products from deposits in northern Europe, or whether they also represent Mediterranean beads, as has been frequently assumed,⁹⁸ cannot be answered here, but perhaps a detailed study could also bring to light different types of beads which could be connected to specific deposits. In contrast, the

amethyst beads of the 6th and 7th century found in southern Scandinavia seem to be comparable with the Merovingian and Byzantine ones, as well as the few examples of amethyst beads from Avar graves in the Carpathian Basin.⁹⁹

Of course, in the light of the wide distribution of droplet-shaped amethyst beads even in the Barbaricum it is debatable whether they should be called 'Byzantine'. At least they reflect an international fashion, but the origin of this fashion and the origin of the material itself must be sought around the eastern Mediterranean.

Notes

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- 43 M.S. Arena *et al.* (eds), *Roma dall'Antichità al Medioevo. Archeologia e Storia* (Museo Nazionale Romano Crypta Balbi), Rome/Milan, 2001, 337, no. II.4.37 (rock crystal), 338, no. II.4.46 (emerald).
- 44 S. Albersmeier, *Bedazzled, 5,000 Years of Jewelry; The Walters Art Museum*, Baltimore/London, 2005, 30.
- 45 Washington DC, Dumbarton Oaks Collection, Inv. no. 75.7,a–c and 75.1: M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection, Volume Two: Jewelry, Enamels, and Art of the Migration Period*, Washington DC, 2005 (2nd ed.), nos 182–3, 159–70, pls III–13 and 115–16, colour plate J.
- 46 Berlin, Antikensammlung, Inv. no. 30219, 508 B: A. Greifenhagen, *Schmuckarbeiten in Edelmetall I: Fundgruppen*, Berlin, 1970, 69–70, colour pl. 5 (does not mention amethyst as a bead material); Baldini Lippolis (n. 29), 138, no. 2.III.1.c, 34; Stolz (n. 3), 538, pl. 3, 1.
- 47 R. Eilmann, 'Bericht über die Voruntersuchungen auf den Kurûm el-tuwâl bei Amrîje', *Mitteilungen des Deutschen Instituts für Ägyptische Altertumskunde in Kairo* 1 (1930), 106–29, esp. 125. The collection of the Petrie Museum in London possesses some necklaces with droplet-shaped amethyst beads of the Coptic/Byzantine period from Illahun and Qau (Inv. no. 6803; 6804; 26358). Additionally some necklaces with identical beads are thought to belong to the Roman period (Inv. no. 26346; 74020; 74086), but given the unknown find contexts it is more probable that they are of a later date. This could also be the case for a gold earring with an amethyst pendant (Inv. no. 58221). On display at the British Museum, London, one can find a necklace with glass beads and an amethyst bead that was found in grave 1411 in Mostragedda (Egypt) of a 4th century or later date (Inv. no. EA 62600–62609).
- 48 Washington DC, Dumbarton Oaks Collection, Inv. no. 58.28: Ross (n. 45), 135, no. 179 B, pl. 94, with seven amethyst beads; Baldini Lippolis (n. 29), 135, no. 2.III.1.c, 11; Washington DC, Dumbarton Oaks Collection, Inv. no. 58.27: Ross (n. 45), 136, no. 179 C, pl. 95, with two amethyst beads; Baldini Lippolis (n. 29), 140, no. 2.III.2.b, 1; Washington DC, Dumbarton Oaks Collection, Inv. no. 59.61: Ross (n. 45), 7, no. 4A, pl. 8, with 13 amethyst beads; Baldini Lippolis (n. 29), 135, no. 2.III.1.c, 12; A. Yeroulanou, *Diatritia. Gold pierced-work jewellery from the 3rd to the 7th century*, Athens, 1999, 216, no. 66. According to Baldini Lippolis the necklaces generally belong to the mid-5th to early 8th century.
- 49 Nicosia, Cyprus Museum, Inv. no. J 429: A. Pierides, *Jewellery in the Cyprus Museum*, Nicosia, 1971, 53, pl. 36, 2; Yeroulanou (n. 48), 215, no. 63 with fig.; Baldini Lippolis (n. 29), 135, no. 2.III.1.c, 13; Nicosia, Cyprus Museum, acquired in 1938: Baldini Lippolis (n. 29), 135, no. 2.III.1.c, 14; Nicosia, Cyprus Museum, Inv. no. 1940/II-23/1: Pierides (*ibid.*), 53, pl. 37, 1; Baldini Lippolis (n. 29), 138, no. 2.III.1.d, 1. According to Baldini Lippolis the necklaces generally belong to the 5th/6th to 7th century.
- 50 Sofia, Museum BAN. S. Uenze, *Die spätantiken Befestigungen von Sadovec (Bulgarien)* (Münchner Beiträge zur Vor- und Frühgeschichte, 43), Munich, 1992, 173; 523, no. SK 2, pl. 126, 3. A very similar collar was part of the Varna treasure unearthed in 1961. The single items are dated to the 5th and early 6th century. The droplet-shaped crystal pendants were identified as opal, which is rather unusual as opal was not one of the most popular kinds of precious stones (see above). Judging from the colour photos amethyst was not used as a mineral material, but at least two different gemstones are visible. Only a scientific examination of the original collar could solve the problem of identification: D.I. Dimitrov, 'Un trésor en or byzantin de la basse époque de Varna', *Bulletin de la Société Archéologique à Varna* 14 (1963), 65–79; I. Venedikov, *Alte Schätze aus Bulgarien*, Sofia, 1965; D.I. Dimitrov *et al.*, *Archäologisches Museum Varna* (Die Museen in Bulgarien, 2), Sofia, 1965, 143–4, pls 68–71.
- 51 Syracuse, Museo Archeologico Regionale and private collection: P. Orsi, *Sicilia Bizantina*, Vol. I., ed. G. Agnello (Collezione Meridionale, Serie III), Rome, 1942, 138–40, fig. 61; Yeroulanou (n. 48), 214, nos 59–60; Baldini Lippolis (n. 29), 136–7, no. 2.III.1.c, 22–27 (5th–7th century); K. Weitzmann (ed.), *Age of Spirituality. Late Antique and Early Christian Art, Third to Seventh Century* (Metropolitan Museum of Art, New York), New York, 1979, 312, no. 286 with fig. Baldini Lippolis mentions amethyst beads for all six chains. In contrast Yeroulanou did not identify amethyst beads as part of chains nos 3 and 4. See also, **Baldini Lippolis, this volume, Pl. 16**.
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- 53 Rome, Museo Nazionale Romano Crypta Balbi, Inv. no. 47894: Arena *et al.* (n. 43), 364, no. II.4.506.
- 54 *Faszination der Antike: The George Ortiz Collection* (Staatliche Museen Berlin), Berlin, 1996, no. 250.
- 55 Athens, Benaki-Museum, Inv. no. 106/25: B. Segall, *Katalog der Goldschmiede-Arbeiten. Benaki Museum Athen*, Athens, 1938, 143, no. 223, pl. 43; E. Georgoula (ed.), *Greek Jewellery: From the Benaki Museum Collections*, Athens, 1999, 305, no. 110, fig. 219; R. Cormack and M. Vassilaki (eds), *Byzantium 330–1453*, London, 2008, 409–10, no. 123 (with inv. no. 1778 and the information about an origin from Antinoë, Egypt).
- 56 Berlin, Skulpturensammlung und Museum für Byzantinische Kunst, Inv. no. 2/72, with two amethyst beads.
- 57 Bloomington, Indiana University Art Museum, Inv. no. 69.88.8, Inv. no. 69.124.10: Yeroulanou (n. 48), 214, no. 57, 215, no. 64.
- 58 Chicago, Field Museum of Natural History, Inv. no. 239181: Baldini Lippolis (n. 29), 139, no. 2.III.1.d, 8.
- 59 New York, Metropolitan Museum of Art, Inv. no. 17.190.1660: J. Spier, 'A Byzantine pendant in the J. Paul Getty Museum', *The J. Paul Getty Museum Journal* 15 (1987), 5–14, esp. 6, fig. 3; Baldini Lippolis (n. 29), 141, no. 2.III.2.b, 7.

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- 61 Munich, private collection of Ch. Schmidt, Inv. no. 1666: C. Stiegemann (ed.), *Byzanz – Licht aus dem Osten*, Mainz, 2001, 321, no. IV.48; L. Wamser (ed.), *Die Welt von Byzanz – Europas östliches Erbe*, Munich, 2004, 306, no. 504.
- 62 R. Paribeni, 'Necropoli barbarica di nocera Umbra', *Monumenti Antichi* 25 (1918), 138–352.
- 63 *Umbria Longobarda. La necropoli di Nocera Umbra nel centenario della scoperta*, Rome, 1996, 89–90, pl. 5; 92–6, pl. 10; 96–7, pl. 17; 97–9, pl. 18; G.C. Menis (ed.), *I Longobardi*, Milan, 1990, 203, no. IV.88.
- 64 Alexandria, Greek-Roman Museum, Inv. no. SCA 187. One sample published by Stolz, in: Goddio and Clauss (n. 6), 363, no. 52, fig. on 233.
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- 66 Nicosia, Cyprus Museum, Inv. no. J 424: Pierides (n. 49), 53, pl. 36,1; Baldini Lippolis (n. 29), 96, no. 2.II.4.f,2; Nicosia, Cyprus Museum, Inv. no. J 425: Pierides (n. 49), 53, pl. 37,3; Baldini Lippolis (n. 29), 96, no. 2.II.4.f,3.
- 67 New York, Metropolitan Museum of Art, Inv. no. 17.190.145-146: Baldini Lippolis (n. 29), 112, no. 2.II.9,1.
- 68 Baltimore, Walters Art Museum, Inv. no. 57.560/561: Weitzmann (n. 51), 314–5, no. 289 with fig.; Baldini Lippolis (n. 29), 98, no. 2.II.5.a,5.
- 69 Sofia, Museum BAN: Uenze (n. 50), 173; 523, no. SK 3, pl. 126,3.
- 70 Syracuse, Museo Archeologico Regionale: E. Possenti, *Gli orecchini a cestello Altomedievali in Italia* (Ricerche Archeologia Altomedievale e Medievale, 21), Firenze, 1994, 69, no. 33, pl. 10,2–3; Baldini Lippolis (n. 29), 109, no. 2.II.8.b,1; E. Riemer, *Romanische Grabfunde des 5.–8. Jahrhunderts in Italien* (Internationale Archäologie, 57), Rahden/Westf., 2000, 435–6, no. 150, pl. 92,1.
- 71 Arezzo, Museo Archeologico Nazionale, Inv. no. 124974a-b: Possenti (n. 70), 72, no. 40, pl. 13,1-2; Riemer (n. 70), 377, no. 70.
- 72 Florence, Archaeological Museum, Inv. no. 72605: Baldini Lippolis (n. 29), 93, no. 2.II.4.c,5.
- 73 Henchir Kasbat (*Thuburbo maius*), Tunisia: D. Quast, 'Völkerwanderungszeitliche Frauengräber aus Hippo Regius (Annaba/Bône) in Algerien', *JbRGZM* 52 (2005), 237–315, esp. 273, no. 3; Mactar (*Mactaris*), Tunisia: *ibid.*, 276–7, no. 5, fig. 30A,1.
- 74 *Early Christian and Byzantine Art* (n. 65), 101, no. 479a, pl. 58; Baldini Lippolis (n. 29), 95–6, no. 2.II.4.e,7.
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- 77 Pforzheim, Schmuckmuseum, Inv. no. 1958/16: Baldini Lippolis (n. 29), 97, no. 2.II.4.f,8.
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- 79 London, British Museum, Inv. no. EA 1877.11-12.34: Baldini Lippolis (n. 29), 146, no. 2.III.8,3.
- 80 Athens, Byzantine and Christian Museum, Inv. no. T 2285: *ibid.*, 146, no. 2.III.8,8.
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- 82 J. Henning, 'Handel, Verkehrswege und Beförderungsmittel im Merowingerreich', in A. Wiczorek et al. (eds), *Die Franken - Wegbereiter Europas*, Mainz, 1996, 789–801, esp. 795; R. Marti, *Zwischen Römerzeit und Mittelalter. Forschungen zur frühmittelalterlichen Siedlungsgeschichte der Nordwestschweiz (4.–10. Jahrhundert)* (Archäologie und Museum, 41), Liestal, 2000, 52.
- 83 J. Werner, *Münzdatierte austrasische Grabfunde* (Germanische Denkmäler der Völkerwanderungszeit, 3), Berlin/Leipzig, 1935, 75.
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- 86 Christlein (n. 84), 72; U. Koch, *Der Runde Berg bei Urach 6: Die Glas- und Edelsteinfunde aus den Plangrabungen 1967–1983* (Heidelberger Akademie der Wissenschaften, Schriften der Kommission für Alamannische Altertumskunde, 12), Sigmaringen, 1987, 346 with literature.
- 87 Koch (n. 86), 346.
- 88 H. Roth and C. Theune, *SWI - V: Zur Chronologie merowingerzeitlicher Frauengräber in Südwestdeutschland* (Archäologische Informationen aus Baden-Württemberg, 6), Stuttgart, 1988, Tabelle 6.
- 89 G. Graenert, *Merowingerzeitliche Filigranscheibenfibeln westlich des Rheins* (Europe médiévale, 7), Montagnac, 2007, 193, no. 29, b (Griesheim, grave 400); 183, no. 6 (Armsheim).
- 90 Grave 9 (1920) from Dürrmenz, Baden-Württemberg, Germany: W. Veeck, *Die Alamannen in Württemberg* (Germanische Denkmäler der Völkerwanderungszeit, 1), Berlin/Leipzig, 1931, 232, no. 3, grave 9 (1920), pl. 27,8; Grave 70 from Knittlingen, Baden-Württemberg, Germany: F. Damminger, *Die Merowingerzeit im südlichen Kraichgau und in den angrenzenden Landschaften* (Materialhefte zur Archäologie in Baden-Württemberg, 61), Stuttgart, 2002, 232, pl. 22B; Grave 131 from Salzburghofen, Bavaria, Germany: R. Knöchlein, *Studien zur Archäologie der Merowingerzeit im Rupertiwinkel*, Munich, 1997, 55–6, pl. 13B.
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- 92 J. Drauschke, *Zwischen Handel und Geschenk – Studien zur Distribution von Waren im östlichen Merowingerreich des 6. und 7. Jahrhunderts anhand orientalischer und lokaler Produkte*, PhD Freiburg, 2005, 58–9; average number of amethyst beads in one necklace: before c. 550: c. 1.4; after c. 550: c. 2.1; end of 6th century: c. 3.0; beginning of 7th century: c. 2.7; before c. 650: c. 2.9; after c. 650: c. 3.2; end of 7th century/ beginning of 8th century: c. 2.3.
- 93 Cross-sections and colour are only seldom described in detail and could therefore not be evaluated.
- 94 The creation of length classes also helps to minimize the effects of possible measuring inaccuracies.
- 95 Von Freeden (n. 38).
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- 97 E.g. in graves 53, 67, 75, 124, 127, 132, and 133 from Buckland. The published amethyst beads reach a length of 2.0 up to 3.0 cm with one exception (1.4 cm): V.I. Evison, *Dover: The Buckland Anglo-Saxon cemetery* (Archaeological Report, 3), London, 1987, 60, pl. 28,53.1a; pl. 37,67.1a; pl. 38,75.1b; pl. 51,124.1; pl. 52,127.1a; pl. 54,132.2a; pl. 55,133.2a.
- 98 Huggett (n. 34), 66–8, fig. 2 (distribution of amethyst beads).
- 99 For information about amethyst beads and Byzantine objects in Scandinavia I would very much like to thank Dr John Ljungkvist – an article on this subject is under preparation; É. Garam, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts* (Monumenta Avarorum Archaeologica, 5), Budapest, 2001, col. pl. 9,1 (Dunapentele); col. pl. 15,2 (Ozora-Tótipusztá).

Byzantine Belt Ornaments of the 7th and 8th Centuries in Avar Contexts

Falko Daim

Introduction

In many different cultures, regions and periods – from the Bronze Age to the present day – the belt is an important dress accessory.¹ It holds trousers and coats together, is valuable jewellery, but can also carry meaning on a number of different levels. Above all, it is a symbol of social position, rank and wealth.² This is true, in particular, for Early Byzantium. The East Roman belt fashion of the late 6th to 8th centuries developed from Late Roman military belts,³ but was also influenced by stimuli from the Sasanian East, whereas influences from the steppe cultures did not play as great a role as had been previously assumed.⁴ As with other types of jewellery – earrings, necklaces, bracelets – Byzantine belts were highly attractive for many neighbouring peoples. Therefore, Byzantine belts have been found among the Lombards in Italy, as well as among the Avars, Bulgarians and Moravians. At the same time a diverse local production, sometimes very different from the Byzantine models, developed in these regions.

Multi-part belt sets may be studied on a number of different levels. As belt decoration changes relatively quickly, the belt, like brooches, constitutes one of the bases of chronological systems. Also, strap-ends and fittings are often decorated with motifs, which, like large-scale reliefs, mosaics and wall paintings, may be analysed from an iconographical point of view. However, the production techniques used to manufacture belt ornaments are also interesting. With the help of technological studies, we can not only obtain information regarding workshop traditions and the technical abilities of the smiths and metal casters, but also about the systems of social values. It is not only the raw materials used which make a piece of jewellery precious; the techniques used and their combination may also have played an important role. Another important question concerns the social function of these belts. Who wore them and on what occasions? Were there, as in Early Medieval China and Japan, precise rules for their use? If we have no written sources on this topic for Byzantium, can archaeological contexts provide answers? Belts and belt sets are an ideal topic for historical research and cultural studies. With the help of a trans-disciplinary approach, belts can reveal something about social reality in the Early Middle Ages, as well as about the transfer of cultural elements and technologies over territorial borders. This paper will attempt to demonstrate the connections between Byzantine and Avar belts, focusing on the opportunities which the relatively reliable Avar chronology offers for dating Byzantine types. Avar imitations have frequently permitted us to identify and date their Byzantine models.

It is nevertheless not possible in every case to determine with certainty whether a particular object is a Byzantine original or a 'barbarian imitation'. If we consider the problem

from a general point of view, then we can distinguish between four main types of product, ranging from 'Byzantine' to 'of Byzantine type':

1. Products made on Byzantine territory, traded and used within the Empire.
2. Products made on Byzantine territory, but brought and used outside the Empire. Here we should mention, for example, diplomatic gifts made especially for this purpose.
3. Products made by Byzantine craftsmen outside the Empire:
 - 3a. according to local tastes,
 - 3b. according to Byzantine tastes.
4. Products made by 'barbarian' craftsmen using Byzantine technology:
 - 4a. according to local tastes (shape and/or motifs), or
 - 4b. according to Byzantine tastes.

Possible criteria for the identification of Byzantine objects are:

1. Shapes and motifs which, according to maps showing their distribution, were popular or accepted only within the Byzantine Empire, but rarely outside its borders.
2. Production techniques which, in Byzantium, were thought to enhance an object's value.
3. Evidence for the existence of workshops on Byzantine territory, such as casting moulds, half-finished products, and so on.
4. The use of raw materials, alloys etc., which may serve as evidence for the location of workshops on Byzantine territory.

The idea that all valuable objects are 'Byzantine' and all objects of lower quality are 'barbarian' (for example, 'Avar'), is definitely incorrect. Of course, even within the Roman Empire, cheaper and less elaborate objects were manufactured and perhaps – this could complicate things – there may have been a special production of low-quality objects for the markets outside of Byzantine territory.

It is obvious that in each individual case, all available data, both antiquarian and scientific, must be evaluated and only if all observations point in the same direction can we expect to obtain more or less reliable results. However, the effort is certainly worth it. The detailed analysis of archaeological finds and their contexts gives us small insights into the interactions of Avar and medieval-Roman culture, indicating what was accepted, adopted, rejected or altered. We can also discern a number of different phases in the spectrum of Avar-Byzantine cultural contacts.

Sources

The written sources from the 6th to the 10th centuries mention belts on several occasions. The Latin panegyric *In laudem Iustini*, written by Corippus to celebrate the occasion of Emperor Justin II's ascent to the throne, is particularly

impressive. In this poem, the author describes the careful stage management of an audience which Justin granted to an Avar delegation, only seven days after the beginning of his reign. The splendidly decorated throne was flanked on either side by two goddesses of victory, which held laurel wreaths over the emperor's head. The emperor was dressed in splendid, pure white and purple clothing, with a gold coat, a gold belt and purple shoes made of Parthian leather.⁵

A 'gold belt' is also mentioned in a murder mystery told by Theophylaktos Simokattes. A member of the imperial bodyguard goes hunting with a Gepid. The man's 'beautiful gleaming dress', his 'gold belt' and 'the horse's gold reins' stir the Gepid's greed. He killed his hunting partner and fled with his loot, but was later caught and executed. The moral conclusion drawn by Theophylaktos regarding this event is quite revealing. The bodyguard's downfall was his 'gold jewellery, because the ornaments were permanently accompanied by envy and persecution'.⁶ This appeal for modesty corresponds notably with the fact that Byzantine jewellery is characterised more by refined production techniques than by weight and monumentality.

A miracle story of St Artemios, written in the late 7th century, also demonstrates the meaning of the belt in Early Byzantine society. This story relates the theft of festive clothes and a belt, as well as of the recovery of the stolen objects with the help of the saint.⁷ The *Vita* of Theodore of Sykeon, written before 650, also contains a great deal of information about life in the provinces. For example, it reports that the saint was equipped with expensive clothes and a gold belt when he was only six years old and sent by his mother to Constantinople, hoping that he would be accepted into the emperor's service.⁸

Belts are mentioned in the *Tractates* and in '*De Administrando Imperio*' by Constantine VII Porphyrogenitus (913–59). They belong among the gifts of different value which should be taken along on diplomatic missions: 'various purple and false-purple belts valued at 1 *nomisma* 4 *miliarēsia* each; and others in false-purple at 1 *nomisma*, and others at 8 *miliarēsia*'.⁹ If a delegation is sent to the Pechenegs, gifts such as purple clothes, silk fabrics, pepper and authentic 'Parthian' leather, as well as belts, should be taken along and distributed among the foreigners according to strict rules.¹⁰

Men with multi-part belts are depicted on a number of mosaics, wall paintings and bronze figures, which have been commented on in several publications recently.¹¹ However, strictly speaking, the only information obtained from studying these sources is that belts with additional straps were worn in the Early Byzantine period in the eastern part of the Empire. The depiction of the family of the rich Roman, Theodotus, in the so-called 'chapel of Zachary' (which he sponsored) in Sta Maria Antiqua in Rome (built between 741 and 752) is an exceptional case in several respects.¹² Theodotus was twice consul and *dux* of Rome – that is, he was supreme commander of the troops. Theodotus and his wife stand on either side of the Virgin Mary with, to their right, a little girl and, to their left, a boy, both of whom are marked as being alive by means of a rectangular halo. The boy, presumably Theodotus' stepson, is wearing a kaftan closed with a multi-part belt. He later became Pope Hadrian, but when the donator's picture was painted, he would have expected to follow in his father's footsteps. Therefore, he is presumably depicted wearing the 'uniform' of a

dux, but certainly the dress appropriate for the social status of his family.

The main sources for our topic, however, are archaeological finds, even if most of them were not discovered on former Byzantine territory, but outside the borders of the Byzantine Empire, from Lombard Italy, the Bavarian and Alamannic territories in the foothills of the northern Alps and in particular from the Avar Empire, in present-day Hungary and adjacent regions. Although it is likely that a number of Early Byzantine belt ornaments still remain to be identified in the storerooms of museums in Turkey, Greece and Italy, this presumably will not alter the general picture completely, because in the Byzantine Empire, jewellery was only rarely placed in graves, while burials outside the Byzantine borders were well furnished, both with dress ornaments and with grave goods in the real sense (for example: food), up to the middle of the 7th century (Lombards), the end of the 7th century (Alamans, Baiuwarians) and even to the end of the 8th century among the Avars. Therefore, we are faced with the strange situation of having to reconstruct important elements of Byzantine culture with the help of find complexes from adjacent regions – on the one hand by means of original products, which reached neighbouring regions in various ways, on the other hand with the help of imitations, which reveal the models of Mediterranean origin, although they were produced locally.

The close connections between Byzantine and Avar culture, although these contacts usually moved only in one direction, can also be used to date the Byzantine originals, as well as certain production techniques and motifs. The chronological system of Avar culture is not equally reliable in all periods so it is useful, indeed even necessary, to reflect on this topic briefly.

The Avars and Byzantium

Due to their steppe-nomadic way of life – only slightly modified to suit the entirely different environment in the Carpathian Basin – the Avars were always regarded as a non-European 'exception'. Like the Scythians and the Huns before them, they guarded their herds, hunted and fought on horseback. Permanent buildings, settlements and towns had no importance for them, while mobility was crucial.

Only very recently have we learned to see the Avars with different eyes. Already more than a 100 years ago their material remains were classified as 'Late Roman', because they included so many antique shapes and motifs. As a result of international historical research in the past 30 years, we have managed to overcome the much too rigid, traditional concepts of 'tribes' and 'peoples'. This has also facilitated a new understanding of the foundation of the Avar Empire and of its diverse contacts with Byzantium. If it were not for Byzantium, the Avar Empire would never have been founded, because large annual payments from Constantinople and rich loot from raids on the Balkans stabilised the khagan's power. Avar representational culture was only created in the Carpathian Basin and in many ways reflects its Byzantine counterpart, or whatever the Avars perceived that to be. The Avars did not adopt techniques, shapes and motifs uncritically, of course. Sometimes, Byzantine models were rejected and for a short period of time in the middle of the 7th century, it seems that a consciously anti-Byzantine orientation prevailed. This seems to

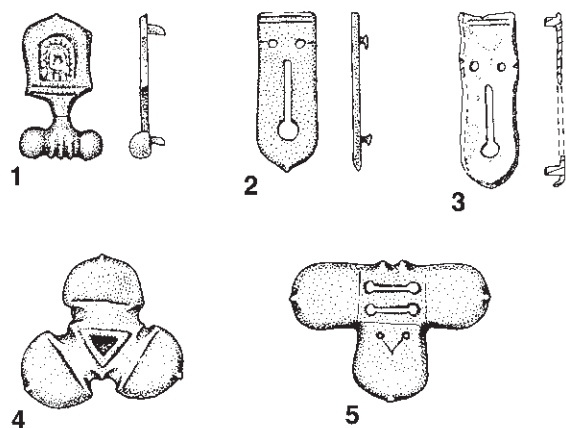


Plate 1 'Mask fittings'. 1, 2 Tolnánemedi; 3 Leobersdorf; 4, 5 Hajduszoboszló. Scale 2:3

be true for the so-called 'pseudo-buckle belt sets'.¹³ In any case, the material remains of Avar culture are extremely relevant for Byzantine archaeology. Over a period of about 200 years, we can observe in which ways Byzantine culture influenced a neighbouring territory.

Remarks on the chronology of the Avar archaeological material (hard and soft facts)

For many Byzantine objects in the larger museums and collections no reliable information regarding provenance and find circumstances is available. Therefore, objects found during proper excavations, particularly grave assemblages with their combinations of object types, which may be evaluated using statistics, are of considerable importance for the chronology of the various types of finds and for recording areas of distribution. Avar graves contain a large number of Byzantine object types and therefore Avar typochronology may be able to assist Byzantine studies in a number of ways. But how reliable is Avar chronology at present?

For the Early Avar period (568 to 650/670) the situation is still rather disadvantageous. Although we do have a number of (absolute) dates derived from coins, these are only *terminus post quem* dates for the burials themselves. The time span between the moment when the (youngest) coin in the grave was minted and the time of burial may be considerable. The 'princely grave' from Kunágota, which is probably from the first quarter of the 7th century, but contains a *solidus* of Justinian I, minted after 542, is a good example. In this case, the coin is not really helpful. Modern interpretations of larger cemeteries from the Early Avar period, such as Zamárdi, using statistical methods and the internal chronology of the cemetery itself, will soon improve the state of research.

The situation is much better for the Middle and Late Avar periods (about 650/670 to about 800). Due to the large number of Avar grave assemblages and the sometimes huge necropoleis consisting of several thousand inhumation graves, the chronological system for the Avar finds from the Middle and Late Avar periods is quite detailed. Absolute dates for characteristic types of objects can be assigned with the help of a number of 7th century coins and, ultimately with the detailed written sources on the fall of the Avar Empire caused by the armies of Charlemagne just before the year 800. The only question is: how long did it take for the production of decorated

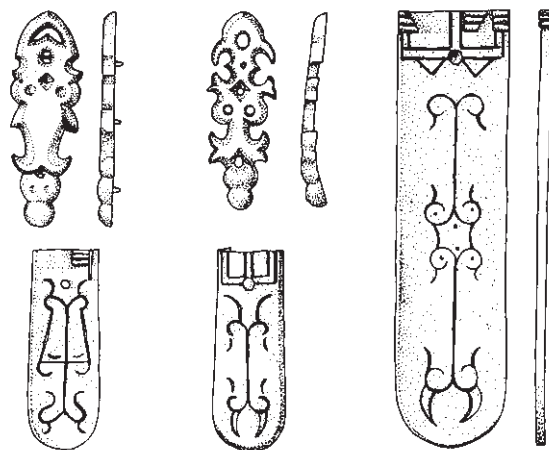


Plate 2 Belt set from Kiskörös, burial 9, selected objects. Scale 2:3

belts within the Avar Empire to stop, once the khagan's power had collapsed? The ideas of the scientific community regarding this question differ considerably.

Byzantine diversity in the archaeological material of the Early Avar period

The archaeological material of the Early Avar period (568 to about 650) is very heterogeneous. Iron pieces of equipment (such as stirrups) and the bow in particular demonstrate close links to Eastern steppe culture. At the same time, there is also a local, Late Roman cultural component as well as a strong Germanic element, presumably due to groups which participated in raids on the Byzantine Balkans. At the end of the 6th and in the early 7th century, brooches from the North Sea and Baltic region are found in the Carpathian Basin and a number of richly equipped women's graves demonstrate that it was possible for people of Germanic origin to gain considerable wealth within the Avar Empire.¹⁴

A few years ago, Garam compiled archaeological material from Avar contexts of the Early and Middle Avar periods, for which she assumed an origin from within the Byzantine Empire, or at least a close connection with Byzantine culture.¹⁵ Whether these are in fact Byzantine products, objects made by Byzantine craftsmen working for Avar customers, or local imitations, must be examined in each individual case. One should also consider that few types of Byzantine jewellery or equipment were distributed over the entire territory of the Byzantine Empire. Rather, it seems that local customs also manifest themselves increasingly in the use of dress accessories. Well known examples are the Sicilian-Byzantine buckles with animal motifs; these represent a unique, local type, and only the shape of the fittings remains the same on a supra-regional level (see Entwistle, this volume, Pls 22–24, 27).

Among the oldest Byzantine belt-fittings are the 'mask fittings', of which only very few examples were found on Avar territory. The more valuable examples of this type are silver castings (Pl. 1). 'Mask fittings' seem to have been most common in the final quarter of the 6th century. Belts elaborately decorated with 'mask fittings' have been found in the northern Caucasus and Sasanian Persia¹⁶ and later variations of this type were also found in Lombard Italy. When the phase of large cemeteries in the Avar Empire began, the era of 'mask fittings' appears to have already been over.

Sheet metal strap-ends with highly stylised linear decoration and scroll ornament are loosely related to the ‘mask fittings’. A belt set consisting of sheet metal strap-ends of this type and of cast belt fittings, was found in Grave 9 in Kiskőrös (Pl. 2).¹⁷ As the combination of sheet metal strap-ends and cast fittings of different shape occurs several times in Lombard Italy, for example in Arcisa Grave 2 as well as in Nocera Umbra Graves 16, 18, 42, 79, 84 and 85,¹⁸ it is likely that the belt ornaments from Kiskőrös came to the Carpathian Basin from Italy. Such sheet metal strap-ends with linear and scroll ornament are frequently referred to as ‘Martynovka’ type, after the treasure found in 1907 in present-day Ukraine.¹⁹ In the late 6th and early 7th century, they seem to have been distributed widely, from Italy to the Black Sea. The ‘dot and comma’ ornament, which was later so popular in Byzantium, may have developed from the ‘linear and scroll’ ornament of the sheet metal strap-ends. According to Garam²⁰ amongst the oldest types of Byzantine belt ornaments is the ‘Fönlak’ type, which was frequently decorated with ‘dot and comma’ ornament and of which several complete sets were found in Avar contexts (Pl. 3).

One of the most important Avar burials is the ‘smith’s grave’ from Kunszentmárton.²¹ The grave assemblage points toward Byzantium in several respects, particularly with regard to a precision scale with several weights of different sizes, but also due to numerous formers (positive models) for sheet-metal fittings (P. 4), including a complete set for the production of a belt set of high artistic quality, which bears a certain resemblance to the belt fittings from Kunágota (Pl. 5). Characteristically, the central medallion of the former for the main strap end contains an anchor-cross.

The gold belt sets of ‘Bócsa-Kunbábony’ type with the so-called ‘pseudo-buckle’ fittings were produced using Mediterranean techniques, from many individual components. Their models, however, are found in the steppes of the northern Caucasus and in the woodlands west of the Ural. Therefore, they cannot be considered Byzantine belt sets.²² The gold belt set with ‘pseudo-buckles’ from Sirmium could be a Byzantine adaptation of this type (see Bálint, this volume, Pl. 27). As it consists of heavy, cast components, finely worked only from the front, this could be a Byzantine product made for a potentate in the Carpathian Basin. The only gold belt set with

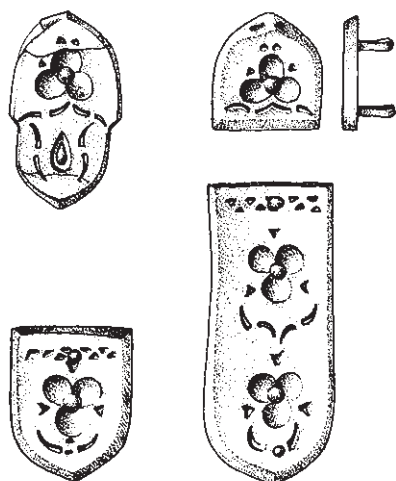


Plate 3 Belt set from Keszthely – Fenékpusztá, Horreum, burial 15, selected objects. Scale 2:3

‘pseudo-buckles’ outside the Carpathian Basin was found in the ‘princely grave’ from Mala Pereščepino (Ukraine), which may be dated to the middle of the 7th century due to the gold coins which are part of the jewellery. It is likely that those Avar graves with gold ‘pseudo-buckles’ belong to the same period.

In the next section I would like to present two archaeological assemblages with Byzantine belts from the 7th century and several belt sets and individual finds from the 8th century.

Kunágota (buried after 542, probably in the first half of the 7th century)

The ‘princely grave’ from Kunágota, found in 1857, was the first rich Avar burial known to archaeologists.²³ The deceased was buried with two horses with decorated bridles. His clothing included various kinds of jewellery, such as eight finger-rings and a belt with gold ornaments (Pl. 5). The sword was covered in gold foil decorated with Dionysian scenes, which may originally have belonged to some kind of casket (see Bálint, this volume, Pl. 24). The grave contained a *solidus* of Justinian I, from 542–62.

For a long time, it was assumed that the components of the belt set had been pressed using dies. However, technical studies carried out by Bühler in 2001 have shown that each component was produced individually, by chasing and *repoussé*.²⁴ The set consists of a main strap end, four large and four small fittings with long attachment loops, four small strap-ends, a double bow-shaped fitting with attachment loops, a strap loop with a ring attached and a husk-shaped ornamental piece of sheet gold with a semi-circular concavity on one side. The fine ornament on the sheet gold is symmetrical and depicts stylised scrolls (according to Garam) or birds. The central sections are framed by rows of beads and by ‘dot and comma’ ornament. The medallion in the centre of the main strap end is not decorated with a monogram, but instead with a fine whorl consisting of five rays. The strap loop

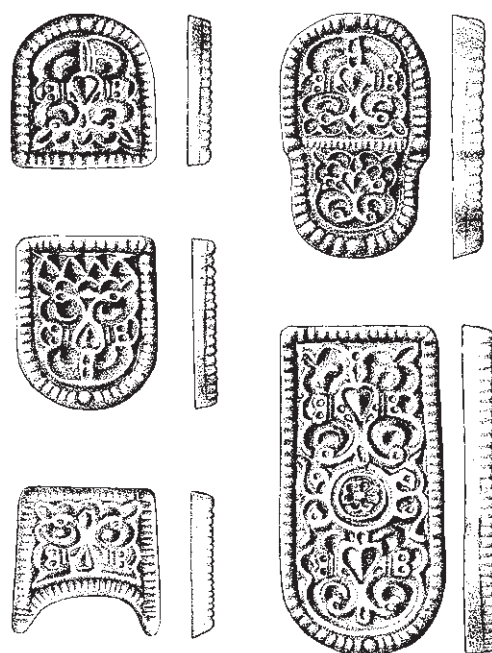


Plate 4 Bronze formers (positive models) from the ‘goldsmith’s grave’ from Kunszentmárton. Scale 2:3

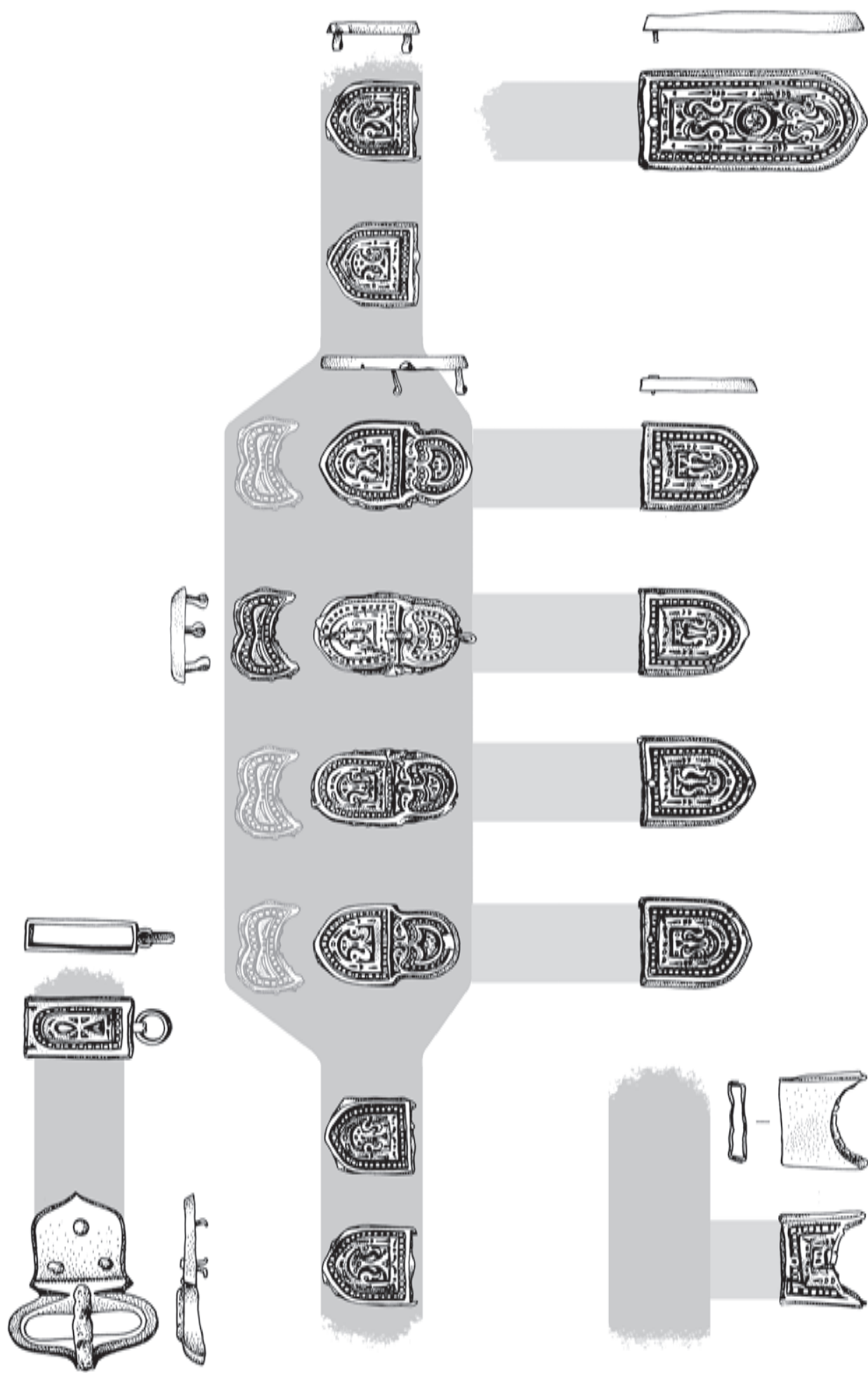


Plate 5 Belt set from Kunágota, reconstruction of the mounted belt ornaments. Scale 2:3

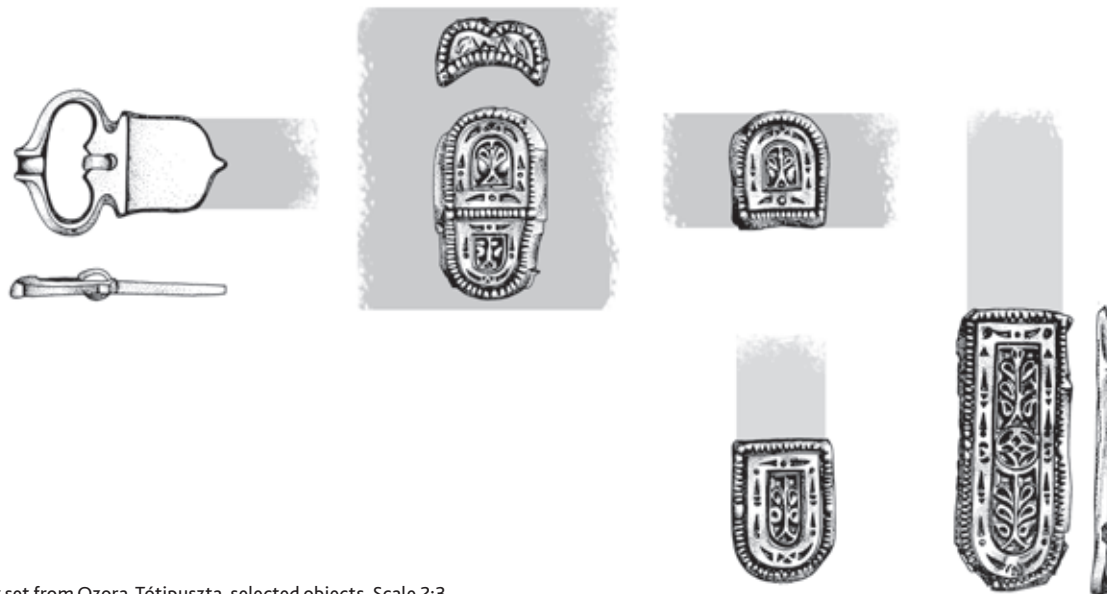


Plate 6 Belt set from Ozora-Tótipusztza, selected objects. Scale 2:3

is decorated with a striking *ankh*-like cross, which is in fact the only definite Christian cross on Byzantine belt sets from Avar contexts, if we do not take into consideration the anchor-cross from Kunszentmárton (see above) and the medallion from Ozora-Tótipusztza (Pl. 6), which bears some resemblance to a cross.

Ozora-Tótipusztza (buried after 669)

The graves from Ozora-Tótipusztza are among the most important Avar burials with respect to Byzantine archaeology. They were discovered by accident in 1871. Unfortunately, the find circumstances are not completely clear, but recently Prohászka has identified archive material which shows this archaeological assemblage in a different light.²⁵ As a result, it is now possible to reconstruct how the two graves were discovered in some detail, although many questions still remain.

The first grave was discovered accidentally in the course of earthworks. The second was found two or three days later during an investigation in the vicinity of the first grave. In the course of this investigation a skeleton lying face-down was found together with sword fragments, a torc, buckles, a finger-ring, small earrings and a chalice-shaped silver vessel. Several pendants were found at the temples of the deceased, the torc with a sheet gold pendant (*bulla*) was located at the neck. A gold coin of Constantine IV (minted 669–74) had been placed on the back of the deceased. Much later, a sword and a silver drinking horn, as well as a glass jug with a copper handle and a silver lid, were also found beside the skeleton. Reputedly, the glass body of the jug was covered with silver on the outside and with gold on the inside. Unfortunately, this object no longer exists. At dawn on the next day, a second ‘bracelet’, two small earrings, pieces of sheet gold (presumably the belt set), the attachment plates of the sword, a silver buckle and a piece of sheet gold from the sword handle were found. According to Prohászka, grave 2 could in fact have been a double burial not completely excavated in 1871. In this case the male skeleton would still be in the ground. It is virtually impossible to clarify whether this assumption is true or not. Alternatively, grave 2 could just have been a man’s grave which, uncharacteristically,

also included a torc and bracelets, as well as a necklace.

At any rate, both graves contained a number of Byzantine objects, so that – if it had been customary for Byzantine citizens to be buried with grave goods – one could have mistaken them for burials of Byzantine citizens. The burial customs are Avar and probably the sword, but even this is still open to discussion.

Although the belt set is made of sheet gold (Pl. 6), it is not as elaborate from a technological point of view as the one from Kunágota. It was produced using formers (positive models), which is why the relief does not have such precise contours on the front. In addition there appears to have been no re-working of details on the decorated pieces of sheet gold before adding the other components of each belt fitting.²⁶ The set consists of a main strap end, one large and three small fittings and six small strap-ends, plus a fitting of double-bow shape and a gilded silver buckle. The individual components are somewhat larger than those from Kunágota and the decoration is coarser, although not unattractive. The strap-ends and fittings repeat the motif shown on the main strap end – a small tree with large leaves – which are attached to the trunk at an oblique angle. In the centre of the main strap end, there is a medallion with a somewhat cross-shaped ornament, which also seems to imitate decoration with precious stones. In this case, the Christian symbol of prosperity and victory (if in fact it is intended as such) is so ambiguous that it could also be interpreted as a geometric ornament. The other objects from the two graves or the double grave are also relevant for Byzantine archaeology, but this is not the place to discuss them.

Because the time at which the finds from Ozora-Tótipusztza were buried can be determined with some precision (after 669), one may be permitted to draw some historical conclusions. In fact this case is an excellent example of how archaeological finds may assist the interpretation of isolated historical sources.

For, in the absence of the archaeological record, how could we interpret the completely isolated story of an Avar delegation being sent to Constantinople in 678/9 in order to congratulate the emperor on the victory of the Byzantine fleet against the Arabs in the vicinity of the capital? The historian would have many ways to interpret this event. However, only the

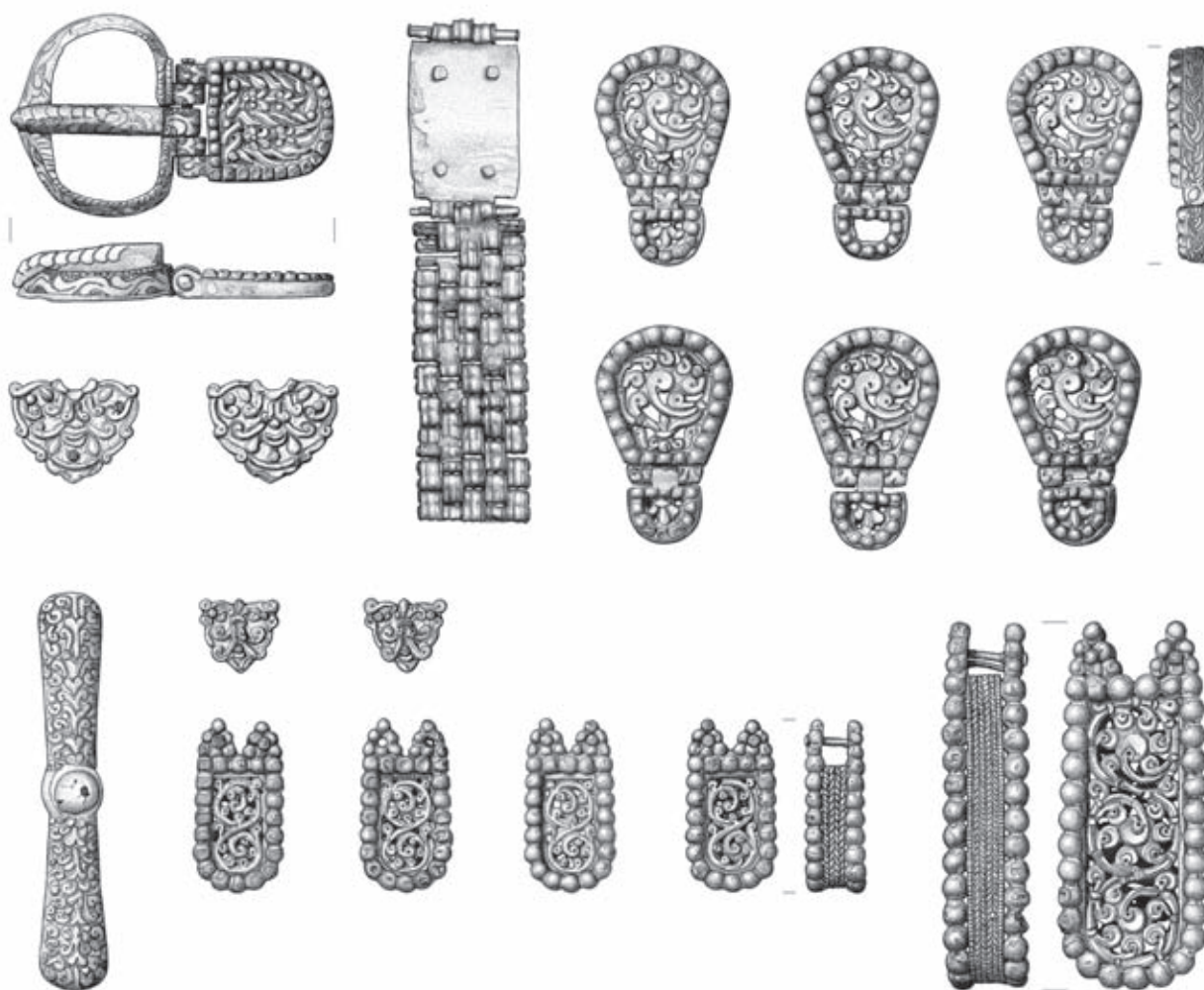


Plate 7 Belt set from Hohenberg. Scale 2:3

archaeological sources demonstrate that this diplomatic activity occurred in a period during which Byzantine coins and luxury goods entered Avar territory, and the Avar elite almost exclusively followed Byzantine fashions. Because this delegation fits well into a clear archaeological picture, it can be interpreted more precisely from the historian's point of view. The process during which the Avar Empire had gradually re-gained its strength had now been more or less completed and, immediately before the foundation of the Bulgarian Empire in 680, Byzantium was looking for allies on its northern border.

Belt fittings from Hohenberg to Szeged (8th century)

The main classes of multi-part belt sets from the late 6th and the 7th century, whose origins lay within Byzantine culture, were identified and described some time ago. This was due in part to self-evident find circumstances, for instance the treasures from Akalan, Mersin and the finds from the Byzantine stronghold at Sadovec (Bulgaria),²⁷ but also to some of the motifs used, such as monograms and Christian symbols of salvation and victory. For the 8th century, the situation is not quite as clear. Although it seems likely that decorated belts were also used in Byzantium in the 8th century, no actual examples of these were known until recently. The key to solving this problem lay within the archaeological material of the Avar Empire, where it was still customary to bury the dead

with clothing, jewellery and grave goods even in the 8th century. In fact we have more than 50,000 Avar grave assemblages from the 8th century and approximately one in ten men's graves contained a cast belt set, most of which were decorated with obviously Mediterranean motifs: circus scenes, griffins, marine spirits riding on dolphins, imperial portraits, vine scrolls and many more.²⁸ The enormous quantity of material, but also the many failed castings and half-finished products from Avar settlements demonstrate that there was an active production of belts within the Avar Empire. But where are the models, and how did an Avar bronze caster become acquainted with the many different motifs?

Recently, a splendid belt set from Hohenberg in the Austrian Alps has been identified as an Italian-Byzantine product (Pl. 7).²⁹ Apart from the decorated belt, the grave also contained a Carolingian sword of excellent quality. The belt's method of production differs from that of the vast majority of Avar parallels. It is made of brass instead of bronze and the main strap end as well as the small strap-ends are complex constructions, consisting of up to 70 individual components (Pl. 8). The historical interpretation of this belt set was assisted by two good parallels which were found recently in Bolzano (South Tyrol, Italy), in an already plundered grave in the church of S. Vigilius, and most notably, by the fresco in the north-western side-chapel of the church Sta Maria Antiqua in Rome (middle of the 8th century), which presumably depicts

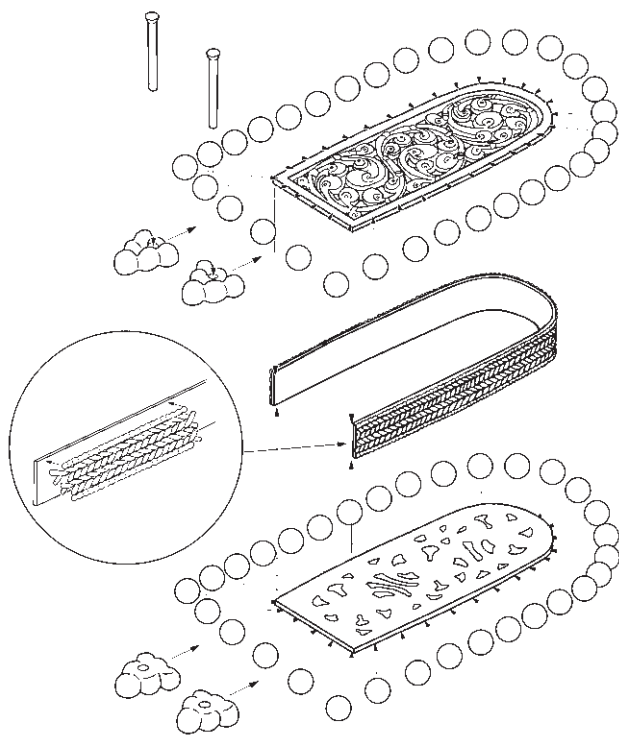


Plate 8 The construction of the main strap end from Hohenberg

the stepson of the donator Theodotus, wearing a short kaftan and a multi-part belt set of this or similar type (**Pl. 9**). As noted above, as Theodotus was supreme commander of the imperial troops in Rome, the boy is perhaps shown wearing the official dress of the *dux* (*magister militum*).³⁰ The chapel, and with it also the fresco, was built between 741 and 752, which fits in quite well with the date established by means of archaeological criteria for the belt sets of 'Hohenberg' type: the third quarter of the 8th century.

Written sources from the early 10th century refer repeatedly to precious belts as diplomatic gifts. There are good reasons to

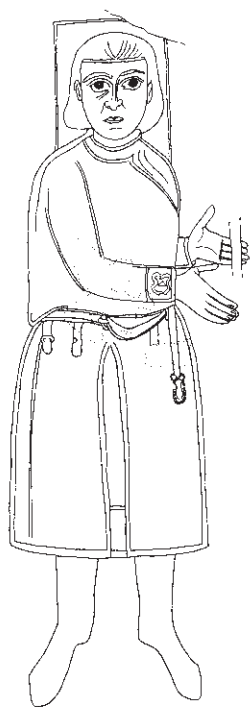
suspect that this is valid also for the 8th and 9th centuries. On the whole, decorated belts appear to have played an important role, both in the representation of high-ranking civilian officials and military officers, as well as in diplomatic relations, and certainly also in trade. It therefore seems reasonable to assume that the high-quality belt set from Hohenberg was brought from Italy to a local potentate by a Byzantine delegation.

The example of a small gold strap end now in the Dumbarton Oaks collection, said to have been found at Aleppo, illustrates how the Avars treated Byzantine models (**Pl. 10 left**).³¹ Several years ago, the Institute for Pre- and Protohistory at the University of Vienna acquired a small private collection of Early Medieval objects which had previously been bought from antique and even flea markets. The collection included a Late Avar belt set with a main strap end which is strikingly similar, in terms of its construction, to the object from Aleppo (**Pl. 10 right**). However, the Byzantine bird-motifs have been replaced by quadrupeds. The same observation was also made when studying the decoration of other suspected Avar imitations.

The fragment of a beautiful strap end from Mikulčice (southern Moravia, Czech Republic) may well be another Byzantine 'original', because, apart from the birds, which peck at grapes on the vine scrolls, it includes several decorative elements which do not occur on Avar finds (**Pl. 11**)³² such as half-palmettes and punched 'dot and comma' ornament. Provided this assumption is correct, the fragment proves that high quality strap-ends consisting of two parts which were put together back-to-back were also produced in Byzantium.

One of the most expressive Byzantine belt fittings was discovered only very recently, in 2004, during excavations at Szeged-Kiskundorozsma, Kettőshatár II, in an Avar grave which had already been robbed in antiquity. The fitting was published by the excavators very soon after its discovery.³³ In 2007–2008, the object was examined in detail at the RGZM in

Plate 9 Wall painting from Sta Maria Antiqua, Rome



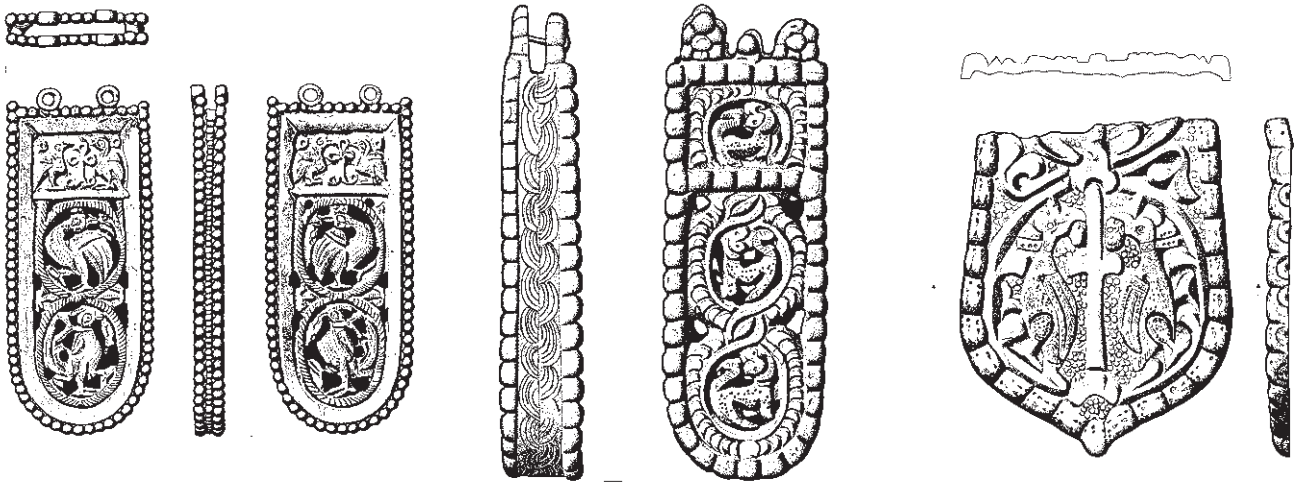


Plate 10 Strap end from Aleppo (left) and Avar strap end (right). Scale 1:1

Plate 11 Fragment of a strap end from Mikulčice. Scale 1:1



Plate 12 Belt fitting from Szeged-Kiskundorozsma. Scale 1:1

Mainz (Pls 12–13). The belt fitting is a little more than 40mm high and weighs about 17g. It consists of numerous silver components, which were soldered together, resulting in a stable construction which was then mercury gilded on the front. The side strip consists of two beaded wires, separated by triangles consisting of nine granules each. The outer edge of the side-strip is decorated all around with a beaded border, worked in *repoussé*, using a frame-shaped piece of sheet silver. Each individual bead was also decorated with triangles and dots, using punches.

In the central decorative section of the fitting, the Byzantine emperor is depicted in profile wearing a diadem, as well as a round brooch on his left (!) shoulder and some kind of breast ornament. He is holding a bundle of laurel in front of his body, with another twig or branch placed behind his head. The figural ornament is surrounded by an arcaded frame. The



Plate 13 Belt fitting from Szeged-Kiskundorozsma. Scale 1:1

contours of the relief ornament on the central sheet are just as precise on the front as on the reverse. This can best be seen on the beads of the diadem. As the contours of the beads on the front and the reverse correspond so remarkably well, it seems likely that a two-part bronze die was used – that is a (negative) die for shaping the front and a (positive) former for shaping the reverse. After the sheets had been pressed in the two-part die, the recesses of the openwork were cut out and some details re-worked using various types of punches. The centrepiece with figural decoration was then soldered onto the sheet silver frame from the front. Using such a two-part die would have facilitated the production of several pieces of sheet silver with identical decoration. This in fact would have been necessary in our case, as belt sets of this type usually included six identical fittings. Three attachment loops, consisting of narrow strips of sheet silver, were soldered onto the reverse of the belt fitting as a means of attachment to the belt. The next step was to mercury-gild the fitting. We do not know what its hinged pendant looked like, presumably it was semi-circular or pentagonal, like the fitting itself.

The belt fitting from Szeged-Kiskundorozsma fits in perfectly with the group of Byzantine belt sets, strap-ends and fittings from the 8th century known at present. In our case, there is more than one Avar adaptation of the type ‘Emperor with a bundle of laurel’. A good example is the mercury-gilded buckle from the Avar cemetery of Leobersdorf (grave 69), which may be placed in the middle of the 8th century.³⁴

The Byzantine emperor, as depicted on this 8th-century fitting, does not conform with his image on contemporary

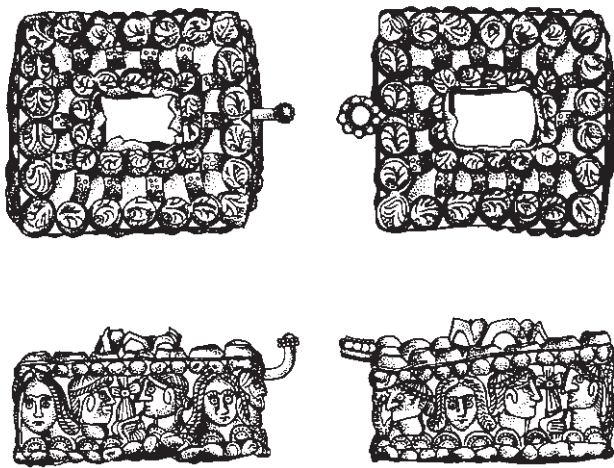


Plate 14 Coat clasp from Dunapataj. Scale 2:3

coins, but rather with his image on 4th-century solidi. The same is true for the bundle of laurel as part of the triumphal ceremony. The only comparable 8th-century example is to be found on the finely worked lid of a small silver box now in the Museo Arqueológico Nacional in Madrid.³⁵ It seems that the motif has not been understood by the Avars, who copied Byzantine fittings in many cases.

Conclusion

As the archaeological record shows, a large amount of Byzantine goods reached Avar territory in the late 6th and 7th centuries. Different items of male and female jewellery, vessels of gold, silver, bronze and glass, but also food and drink, as the amphorae show. In the 8th century, however, we find only belt ornaments in graves. It is likely that they served as diplomatic gifts. One exception is the high-quality, gold clasp (= coat-fastener) from Dunapataj.³⁶ It was made from sheet gold by chasing and *repoussé* and depicts heads en face and in profile (Pl. 14). A cross, held by the figure on the left, is depicted between the heads in profile. Presumably, this clasp was brought to the Carpathian Basin in the second half of the 8th century, together with a valuable coat. Further research will show whether this is in fact, apart from the small number of belt ornaments identified so far, the only Byzantine object from the 8th century in the Carpathian Basin.

Notes

- 1 A warm thank you to all the colleagues who gave me advice and help while preparing this article and especially to Birgit Bühler for the translation.
- 2 Most recent research on this topic: C. Schopphoff, *Der Gürtel. Funktion und Symbolik eines Kleidungsstücks in Antike und Mittelalter* (Pictura und Poesis. Interdisziplinäre Studien zum Verhältnis von Literatur und Kunst 27), Cologne, 2009, which, however, excludes Byzantium almost completely.
- 3 C. Wickham, *Framing the Early Middle Ages. Europe and the Mediterranean, 400–800*, Oxford, 2006, 175.
- 4 J. Werner, 'Nomadische Gürtel bei Persern, Byzantinern und Langobarden', in *Atti del convegno internazionale sul tema: La civiltà dei Longobardi in Europa (Roma, 24–26 maggio, 1971)* (Civildale del Friuli, 27–28 maggio 1971), (Accademia Nazionale dei Lincei 371), Rome, 1974, 109–56.
- 5 A. Cameron (ed.), *Flavius Cresconius Corippus. In laudem Iustini Augusti minoris libri IV*, London, 1976, II. 115; W. Pohl, *Die Awaren. Ein Steppenvolk in Mitteleuropa 567–822 n. Chr.*, Munich, 1988, 48–9.
- 6 C. de Boor (ed.), *Theophylacti Simocattae historiae*, Leipzig, 1887

- (repr. Stuttgart, 1972), VI, 2, 1–9; M. and M. Whitby, *The History of Theophylact Simocatta. An English Translation with Introduction and Notes*, Oxford, 1986, 159ff; P. Schreiner, *Theophylaktos Simokates. Geschichte*, Stuttgart, 1985, 163ff.
- 7 Recently mentioned in: S. Efthymiades, 'A Day and Ten Months in the Life of a Lonely Bachelor: The Other Byzantium in Miracula S. Artemii 18 and 22', *DOP* 58 (2004), 1–26. I would like to thank Cyril Mango for drawing my attention to this source. V.S. Crisafulli and J.W. Nesbitt, *The Miracles of St Artemios. A Collection of Miracle Stories by an Anonymous Author of Seventh-Century Byzantium*, Leiden/New York/Cologne, 1997, mir. 18, 114–20.
- 8 A. Cameron, *The Byzantines*, Oxford, 2006, 117; A.–J. Festugière (ed.), *Vie de Théodore de Sykeôn*, Brussels, 1970, no. 5, cf. no. 12.
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- 10 R.J.H. Jenkins and Gy. Moravcsik, *Constantine Porphyrogenitus, De Administrando Imperio* (Corpus fontium historiae Byzantinae I), Washington DC, 1985, ch. 6, 52. Cf. K. Belke and P. Soustal, *Die Byzantiner und ihre Nachbarn, Die De Administrando Imperio genannte Lehrschrift des Kaisers Konstantinos Porphyrogennetos für seinen Sohn Romanos*, Vienna, 1995, 75. Cf. R.J.H. Jenkins (ed.), *De Administratio Imperio, Vol. II. Commentary*, London, 1962, esp. 14–15.
- 11 M. Schmauder, 'Vielteilige Gürtelgarnituren des 6.–7. Jahrhunderts', in F. Daim (ed.), *Die Awaren am Rand der byzantinischen Welt. Studien zu Diplomatie, Handel und Technologietransfer im Frühmittelalter* (The Avars on the Border of the Byzantine World. Diplomacy, Trade and the Transfer of Technology in the Early Middle Ages) (Monographien zur Frühgeschichte und Mittelalterarchäologie 7), Innsbruck, 2000, 15–44; Cs. Bálint, 'Byzantinisches zur Herkunftsfrage des vielteiligen Gürtels', in *idem* (ed.), *Kontakte zwischen Iran, Byzanz und der Steppe im 6.–7. Jahrhundert* (Varia Archaeologia Hungarica), Budapest, 2000, 99–162.
- 12 A. Rettner, 'Zu einem vielteiligen Gürtel des 8. Jahrhunderts in Santa Maria Antiqua (Rom)', in Daim (n. 11), 267–82; H. Belting, 'Eine Privatkapelle im frühmittelalterlichen Rom', *DOP* 41 (1987), 55–69.
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- 14 M. Menke, 'Zu den Fibeln der Awarenzeit aus Keszthely', *A Wosinsky Mór Múzeum Évkönyve XV* (1990), 187–214. For two examples of rich women's graves with a Germanic background of the late 6th or early 7th century, see: A. Kiss, *Das awarenzeitliche Gräberfeld in Kölked-Feketekapu B* (Monumenta Avarorum Archaeologica 6), Budapest, 2001, Taf. 29–31 and 34–9.
- 15 É. Garam, 'Gürtelverzierungen byzantinischen Typs im Karpatenbecken des 6.–7. Jahrhunderts', *Acta Archaeologica Hungarica* LI (1999/2000), 379–91; *eadem*, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts* (Monumenta Avarorum Archaeologica 5), Budapest, 2001.
- 16 Cs. Bálint, 'Kontakte zwischen Iran, Byzanz und der Steppe. Das Grab von Üç Tepe (Sowj. Azerbajdžan) und der beschlagverzierte Gürtel im 6. und 7. Jahrhundert', in F. Daim (ed.), *Awarenforschungen I* (Archaeologia Austriaca - Monographien 1), Vienna, 1992, 309–496, in particular Taf. 29–56.
- 17 T. Horváth, *Die avarischen Gräberfelder von Üllő und Kiskőrös* (Archaeologia Hungarica XIX), Budapest, 1935, Taf. XXIV.
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- 29 F. Daim, 'Byzantinische' Gürtelgarnituren des 8. Jahrhunderts ('Byzantine' Belt Sets of the 8th Century), in *idem* (n. 11), 77–204, esp. 136ff.
- 30 See also n. 12.
- 31 Daim (n. 29), 110ff.
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- 35 *Ibid.*, 78.
- 36 É. Garam, 'Über das awarenzeitliche goldene Agraffenpaar von Dunapataj', *Folia Archaeologia* XL (1989), 137–53; F. Daim and B. Bühler, *Awaren oder Byzanz? Interpretationsprobleme am Beispiel der goldenen Mantelschließe von Dunapataj*, in T. Vida (ed.), *Thesaurus Avarorum. Régészeti tanulmányok Garam Éva tiszteletére* (Archaeological Studies in Honour of Eva Garam), Budapest, 2009 (in print).

Byzantine Influences on Visigothic Jewellery

Barry Ager

The subject of this paper concerns the jewellery of the Visigoths after their settlement in the Iberian peninsula, the former Roman province of *Hispania*. It is intended as a review of the evidence, so follows a path well trodden already by archaeologists and art-historians of the Visigothic period, including N. Åberg, P. de Palol, G. Ripoll López, H. Schlunk and T. Hauschild.¹

To set the Visigoths briefly in their historical context, they derived from the groups of Gothic peoples who had migrated from Eastern Europe to the Pontic regions of the Ukraine and Romania in the 3rd century AD.² Linguistically and, to a large extent societally and culturally, they were Germanic. But they had adopted Arian Christianity in the late 4th century and, during the 42-year course of their further migration from the steppes to south-west France (where they were settled as Roman federates in 418–19), and eventually into Spain, where they had initially supplied military assistance to the Romans, at the end of the 5th century. Driven into exile by the Huns, once they had entered into the East Roman Empire – as the research of recent years has emphasised – they came to form more of an army on periodic marches than an ethnic group, amalgamating with other Gothic and Germanic elements as well as with non-Germanic groups, such as the Alans, Sarmatians and Galindi. They were joined by slaves on the run from their masters and by disaffected, or displaced, Roman inhabitants.³ In the late 5th century many Gallic aristocrats rejected the Emperor Anthemius (467–72) as a Greek emperor and preferred an alliance with the Visigoths, while the Visigoths themselves supported the imperial administration until the momentous events of the 470s.

The Visigoths thus had plenty of time to become closely familiar with Mediterranean culture and although curiously little archaeological testimony other than a handful of brooches, buckles and a few combs of eastern Germanic type testifies to their establishment of the Kingdom of Toulouse in the early 5th century, there is increasing evidence for their occupation of one or two villas, such as Séviac and La Turraque (Gers).⁴ Future discoveries may alter the picture, but it would appear so far that there was either rapid acculturation, or the general adoption of Christian burial practices that might have skewed the survival of material remains. At the same time, although new political institutions emerged, the old Roman legal and social order was retained to a greater or lesser extent.

Following their defeat at the battle of Vouillé by the Franks under Clovis in 507, the Visigoths were expelled from their extensive territories in Gaul south of the Loire, except for the region of Septimania around Narbonne, Nîmes and Carcassonne, and settled in Spain.⁵ There in contrast to the situation in south-west France, cemeteries traditionally regarded as Visigothic – where the dead were buried with grave goods and dressed in Germanic style with jewellery and

costume fittings – are relatively numerous in the northern Meseta region particularly.⁶ But it is a question of current debate whether they are truly Visigothic, or whether they represent to some degree contingents of the other main Gothic grouping, of Ostrogothic soldiers and their womenfolk, who had joined with the Visigoths, or other generic eastern Germanic federates who had left northern Gaul after the brief sub-Roman ‘kingdom’ of Syagrius there had come to an end.⁷

The women were buried wearing a pair of bow brooches at the shoulders, indicating a ‘peplos’ type of sleeveless dress (Pl. 1), and buckles of a belt at the waist in a fashion typical of the elite of the Danubian region, of whatever ethnic affiliation, rather than Visigothic *per se*, although the males were generally buried without weapons, which is a Gothic trait.⁸

The Visigoths in the Iberian peninsula effectively constituted only a small, though powerful minority ruling over the native Hispano-Roman population and, to put this in some kind of perspective, estimates vary up to a maximum of around 200,000 Visigoths among perhaps 7–10 million native inhabitants.⁹ Many of the structures of Roman society lived on and some towns even continued to govern themselves into the 6th century, while the Roman senatorial aristocracy maintained much of their wealth and status alongside the new Gothic nobility, especially in Baetica, the most romanised part of southern *Hispania*, which roughly corresponded in area to modern-day Andalusia.¹⁰ The patricians of Córdoba even continued to maintain the fiction of the Roman Empire in the West in the 6th century. But this is not to say that the Roman



Plate 1 Mid-5th-century Danubian female costume



Plate 2 One of a pair of disc-brooches of Visigothic type, British Museum (PE 1995,12-7.9)

way of life did not have to adapt and the appointment of *curiales* finally ceased in the late 7th century. The shrinking of towns indicates a decline in population over the period.

From early in the Visigothic period the jewellery reflects western Mediterranean influence, such as the adoption of disc-brooches, some with cruciform designs of possibly Christian inspiration (although still often worn in pairs in Germanic fashion) (Pl. 2), and *cloisonné* buckles with a wide variety of geometric designs inlaid in glass or garnet, which may have been produced in the Narbonne area during the 6th century (Pl. 3).¹¹

These influences took on a more distinctively Byzantine intensity following the attempts by Justinian I to reconquer the former Roman provinces of the West Roman Empire and control trade in the western Mediterranean and through the Straits of Gibraltar.¹² In 552 he sent military support to the rebel magnate Athanagild, who seized control of the kingdom, while, around 560, Byzantine forces took over the ports and towns of the southern and south-eastern coasts (*Spania*) and the Balearic Islands, centred on the capital established at Cartagena. How far their rule extended inland, or into the Algarve region, is less clear, although Córdoba was held until 572. Byzantine forces also later came to the aid of Hermenegild, the son of King Leovigild, who had been sent as a co-ruler to Hispalis (Seville), but had instigated a rebellion in 579. They were bought off by Leovigild, however, although they carried off Hermenegild's Catholic Austrasian wife, Ingundis, who died *en route* to Constantinople.

The sources also tell of Syrian traders in the south, especially in Hispalis, and of Greeks in Mérida and other towns of Baetica, such as Mertola, where inscriptions in Greek have also survived.¹³ Bishop Paul of Mérida (530–60) and his successor Fidelis (560–71) were of Greek origin, so presumably from the eastern Mediterranean region, and some Greek inscriptions from the region are preserved there in the Museo Nacional de Arte Romano.¹⁴

Major political and cultural changes took place during the reigns of Leovigild (568–86) and his son Reccared (586–601). But political contacts alone seem insufficient to explain the strongly Byzantinising cultural shift and a major stimulus must have been given by Mediterranean trade contacts through surviving ports such as Barcino (Barcelona) with North Africa, Egypt, Syria and Constantinople.¹⁵ The main archaeological

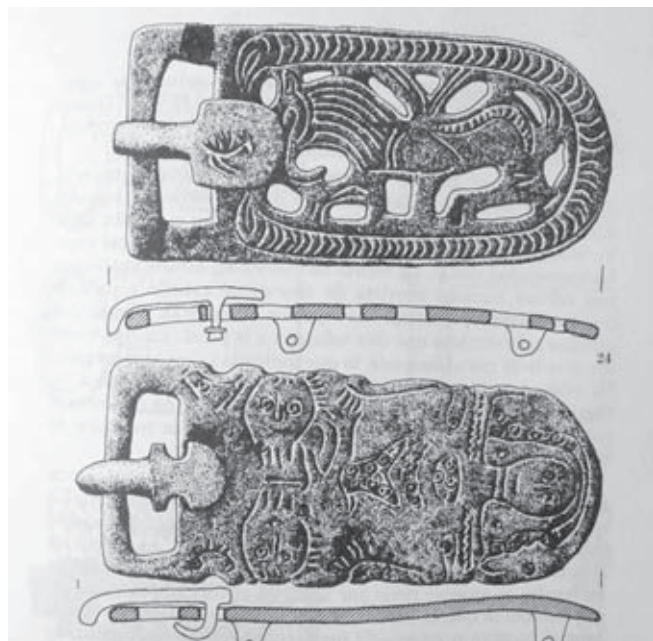


Plate 3 *Cloisonné* buckle-plate with inlaid geometric designs, London, British Museum (PE 1995,12-7.8)

evidence for this exchange is the importation of fine ceramic table-ware, particularly from North Africa, as well as Egypt, Asia Minor and Cyprus; silk from the East; and the discovery of late 6th-century Visigothic gold coins as far away as Israel and the Lebanon.¹⁶

Leovigild succeeded in establishing Visigothic rule over virtually the whole of *Hispania* and, in a manifest example of *imitatio imperii*, deliberately sought to reshape the kingdom in the image of the Byzantine Empire, adopting imperial pomp and lavish ceremonial, both as a conscious echo of the majesty of Heaven on Earth, and as a symbol of his power.¹⁷ The witness to this is Isidore of Seville's *History of the Goths* (ch. 51) and other 7th-century texts. The diadem, sceptre, throne, and rich vestments including the purple appear to have been based on Byzantine models, although the extent of the influence is a matter of debate, and both royal servants and altar boys wore silk cloaks.¹⁸ In 576, Leovigild issued gold *tremisses* in his own name without the names of the Eastern emperors, the first Visigothic and possibly the first 'barbarian' king to do so, although there seem to be conflicting claims.¹⁹ In so doing he was both setting himself up as the equal of the Eastern emperor and distancing himself from the Gothic nobility, among whom the king had been previously *primus inter pares*. It is notable that the victory imagery of his coins is an imperial borrowing.

King Reccared (586–601) converted from Arianism to Catholicism in 587, followed by the Visigoths themselves after the 3rd Council of Toledo in 589, which had established Catholicism as the religion of the entire kingdom.²⁰ This momentous event marked the final rapprochement of the Gothic nobility and the upper classes of Roman origin, after the end of the prohibition of intermarriage six years previously (although how effective the prohibition had ever been in later years is questionable). To what extent Visigothic material culture had already been affected by commercial, political and social contact with Byzantine *Hispania*, or whether the council itself was the major catalyst for change is debatable, but it is quite clear that there was a radical change in female costume in the last third of the 6th century, which must reflect the adoption of the sleeved Mediterranean *tunica*. Paired shoulder brooches were abandoned and the showy buckles with rectangular plates were replaced by copper-alloy, fixed-plate forms of Italian derivation and frequently found in male graves, following the typology of Ripoll López (Pls 4–5).²¹ They



Plates 4 and 5 Copper-alloy fixed-plate buckles of Italian derivation

were decorated with griffins and lions drinking at the Fountain of Life and other scenes from Christian iconography, alongside simpler, plain forms (Pl. 6). The tongue-shaped plates of some examples are clearly based on Byzantine models, such as a late 7th/early 8th-century buckle, possibly from Jerusalem, which depicts a scene from the *Physiologus* (the Greek treatise on natural history) of a stag in combat with a dragon as an allegory of Christ's triumph over the Devil according to Eger's interpretation (Pl. 7).²²

As a backdrop to this artistic development, in the 7th century, particularly during the Isidoran era, *Hispania* became



Plate 6 Copper-alloy fixed-plate buckle, London, British Museum (PE 1990,6-4,7)



Plate 7 Copper-alloy buckle with a scene from the *Physiologus*, London, British Museum (PE 89,5-11,16)

an important focus of western Christendom. After the 670s it also provided a haven for Byzantine refugees from North Africa in the wake of the Islamic conquest, whose influence has been detected in church architecture and decoration.²³

Numerous examples of buckles of Byzantine type from *Hispania* may reflect both these events and contacts with the Byzantine-occupied southern coastal region. They include late 6th to 7th-century buckles of most of the types originally defined by Werner, such as the Balgota, Bologna, Corinth, *Hippo Regius*, Sucidava and Syracuse types.²⁴ It is also possible that moulds were imported for copying locally. Byzantine metalwork of the minor arts may also have reached *Hispania* by way of another type of import: by diplomatic gift as discussed by Daim.²⁵ A Byzantine gold medallion bearing the scene of the Adoration of the Magi in the British Museum is evidently an example of the type that provided the model for the gold disc brooch with a Greek inscription from Medellín (Pls 8–9).²⁶ The question arises whether the latter was an oriental import, or even perhaps a product of the Byzantine enclave. The lack of a secure provenance unfortunately makes



Plate 8 Gold medallion with the Adoration of the Magi, London, British Museum (PE 1986,7-8,1),



Plate 9 Gold disc brooch with the Adoration of the Magi from Medellín

it difficult to say if a disc brooch in the collection of the Ariadne Galleries also portraying the Adoration is from *Hispania* or Byzantium.²⁷

In the 7th century, so-called 'lyre-shaped' and typologically related buckles copying Byzantine, or more generally Mediterranean, types (especially 'Trebizond') came into fashion in the Hispano-Visigothic kingdom, extending into Narbonensis and rarely into south-west France, although in cast copper-alloy rather than in precious metal (**Pls 10–11**).²⁸ *Hispalis* (Seville) appears to have been an important centre of production. Local versions decorated with silver and brass inlay, a Frankish or Burgundian technique, were developed in the late 7th century.²⁹ The end date for the 'lyre-shaped' type in *Hispania* is uncertain, but they most likely continued in use for some while after the beginning of the Islamic conquest in 711. Apart from their personal names, the Visigoths had become more or less completely assimilated by the late 6th century and spoke Latin as exemplified by the inscription on the buckle-plate from Hinojar del Rey (**Pl. 12**).³⁰ So it becomes proper now to speak of Hispano-Visigothic art, which was probably developed in the workshops of the urban centres of Baetica and Lusitania, such as Seville, spreading from there throughout the kingdom. The finest examples of the 'lyre-shaped' buckles have raised borders enclosing recessed fields of ornament developed from a type that is found in the Byzantine region of Italy and lead models for such buckles have been found in the excavation of the 7th-century workshop at the Crypta Balbi, Rome.³¹

A Byzantine buckle depicting a crocodile enclosed by a double-headed serpent is based on a chapter in the *Physiologus* (**Pl. 13**).³² A group of buckles is recorded from Spain, e.g. from León, portraying what appear to be related scenes of

quadrupeds, possibly lions, fighting snakes.³³

Because of the scarcity of coins from burials and the long periods of their circulation, close dating of the lyre-shaped buckles is difficult, but the fine gold buckle from the high-status, coin-dated burial, or hoard, at Mala Perešćepina in the mid-Dnieper Valley, of the mid- or second third of the 7th century helps to establish the approximate period (**Pl. 14:II**).³⁴

The extent of the copying of both form and detail that went on in *Hispania* is quite remarkable. For example, a monogram in Roman letters that may be read as the personal name *Fidelis* on a fragmentary Hispano-Visigothic buckle-plate (**Pl. 15**) imitates the style of inscribed Byzantine buckles, such as a piece in gold in the British Museum (**Pl. 16**), or a bronze buckle from Athens (**Pl. 17**), but filigree interlace was not used (**Pl. 18**). Ripoll López notes a Spanish buckle with a laurel wreath and cross derived from Byzantine coins in a similar position on the terminal.³⁵ Hispano-Visigothic buckles of the 7th/early 8th century with cruciform plates, which are fairly rare, also derive from Byzantine forms, such as a further buckle from Athens (**Pl. 19**).³⁶ One is inscribed with a Gothic name. The Hispanic buckles, however, are mainly in the form of a Latin cross (**Pl. 20**), while eastern types are in the form of a Greek one. Belt clasps of Byzantine type were also adopted.³⁷

In contrast with the art of other Germanic kingdoms of western and northern Europe, early Visigothic art had only a very limited tradition of stylised animal representation. But now the lyre-shaped buckles, such as the fine plate from Hinojar del Rey (**Pl. 12**) are decorated with animal motifs, or simply their heads.³⁸ They most likely represent griffins with beaks and ears from a comparison with designs on contemporary ecclesiastical metalwork and sculpture,



Plate 10 Copper-alloy buckle of 'Trebizond' type



Plate 11 Italo-Byzantine 'lyre-shaped' buckle



Plate 12 Buckle-plate from Hinojar del Rey



Plate 13 Gilded buckle with crocodile and snake, London, British Museum (PE 1984,10-4,1)

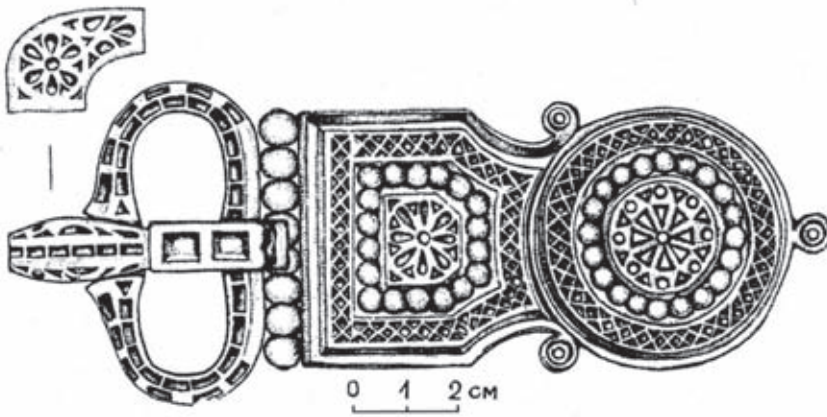


Plate 14 Gold buckle from Mala Perešćepina



Plate 15 Buckle-plate with monogram, London, British Museum (PE 1992,6-5,2)



Plate 16 Gold buckle with monogram, London, British Museum (PE 1974,9-10,1)



Plate 17 Bronze buckle from Athens, London, British Museum (PE 80,5-1,13)



Plate 18 Bronze buckle with filigree interlace, London, British Museum (PE 91,5-12,21)



Plate 19 Bronze buckle with cruciform plate, London, British Museum, (PE 81,7-19,66)

e.g. a late 7th-century, cast copper-alloy paten decorated with griffins and possibly boars in a Madrid collection (Pl. 21), or a piece of sculpture from the chancel screen of the church of San Miguel de Liño, Oviedo (Pl. 22). The griffin, with its combination of terrestrial/human and aerial/divine characteristics, is probably of oriental derivation and is thought to be of Christian significance, appearing to have symbolised divine power, guardians of the souls of the dead, the peace of Paradise (derived from the visions of Isaiah), and even Christ himself.³⁹ It generally forms a counterpart to the hippocamps of Lombardic metalwork. Vegetal motifs were also popular, and occasionally fish, as well as other designs of Late Antique origin, such as scallop shells, palmettes and half-palmettes.

Åberg has demonstrated the stylistic connections between the Byzantine style in Italy and its Visigothic analogues, drawing attention particularly to the animal and vegetal motifs (Pl. 23). But they extend also to a Visigothic imitation of 'dot and comma' decoration, a stylised vegetal ornament derived from sculpture, although not generally as crisply defined as Byzantine and Italo-Byzantine work (Pl. 24).⁴⁰ The Byzantine influence on Visigothic sculpture is discussed by Cruz Villalón and Perea.⁴¹

It was not just the buckles that were so widely imitated, but items of personal jewellery, too, such as a pair of 7th-century earrings from Puente Genil, that appear to be decorated with amethysts and Mediterranean-style interlace combined with

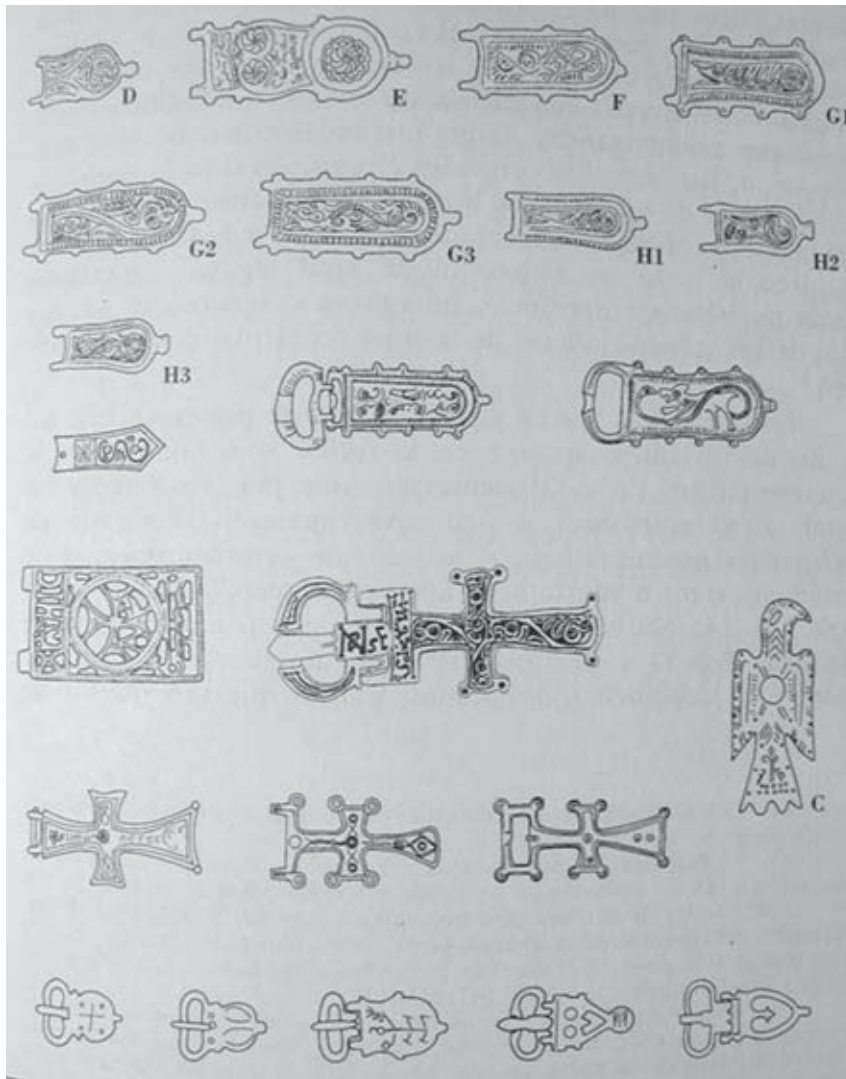


Plate 20 Hispano-Visigothic buckles of cruciform and other types



Plate 21 Hispano-Visigothic paten



Plate 22 Sculpture from a chancel screen of the church of San Miguel de Liño, Oviedo

Plate 23 Hispano-Visigothic motifs

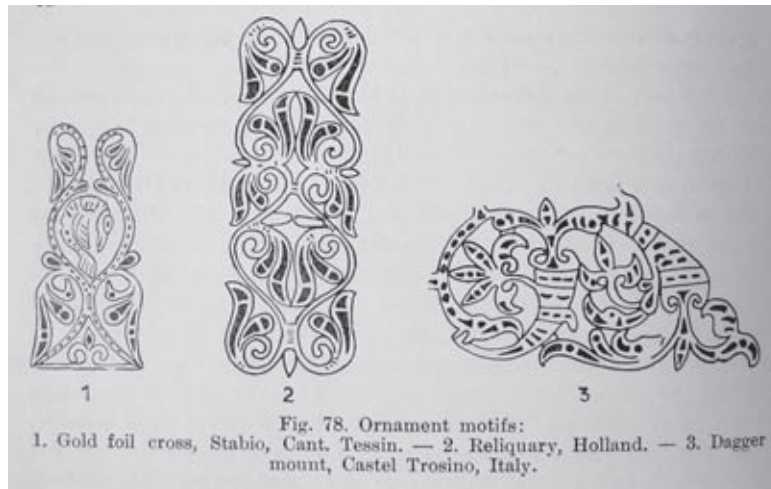
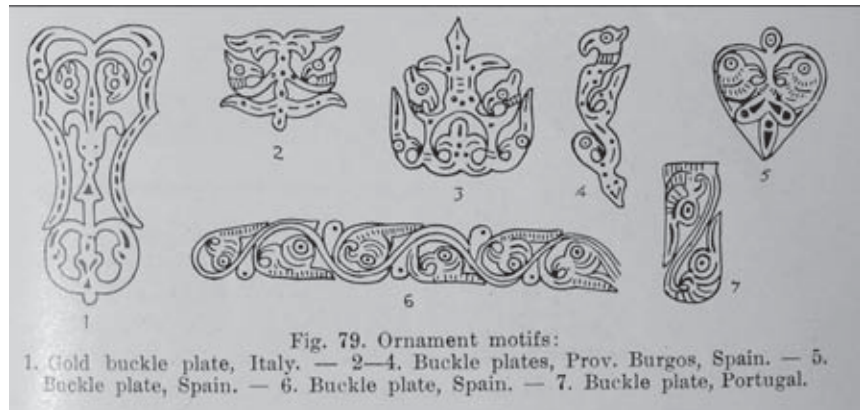


Plate 24 Italo-Byzantine 'dot and comma' motifs

zoomorphic elements reminiscent of Salin's Germanic Animal Style II (Pl. 25); earrings of 'basket' type of Byzantine derivation (Pl. 26); or finger-rings with high bezels in Byzantine style (Pl. 27).⁴² A Byzantine earring from Spain in the Walters Art Museum shows that Byzantine artefacts could have served as direct models.⁴³ Hispano-Visigothic craftsmen, including jewellers, were based in the towns, and it is probable that the workshop of the palace goldsmith was established at the capital of Toledo by Leovigild and the post of *praepositus argentariorum*, in charge of the court *argentarii* is referred to in one of the laws of Chindaswinth (642–53).⁴⁴

These close cultural contacts notwithstanding, King Sisebut (612–21) led two campaigns against the Byzantines in Spain, who were finally expelled from the peninsula in 628 by his eventual successor Swinthila (621–31).

It is unknown how much of Alaric's booty from the sack of Rome in 410 still formed part of the royal treasury. But the Visigothic Church was very rich and the great wealth of the nobility, too, is demonstrated by the fine of 27,000 *solidi* that the son of Theodemir had to pay to the Arabs; the equivalent of 123kg of gold.⁴⁵



Plate 25 Earrings from Puente Genil



Plate 26 Earring of basket type



Plate 27 Finger-ring with high bezel



Plate 28 Votive crowns from Guarrazar



Plate 29 Crown of King Recceswinth



Plate 30 Leaf-shaped links from crown of King Recceswinth



Plate 31 Leaf-shaped pendant. London, British Museum (PE 1981,1–4,4)



Plate 32 Re-used brooch from the Museo Arqueológico, Madrid



Plate 33 Pendant cross from crown of Swinthila



Plate 34 Gold saddle mounts from Nocera Umbra

A mid- to late 7th-century renaissance stemming from the court is attested by the production of the gem-encrusted, gold votive crowns from the famous hoards of Guarrazar, discovered near Toledo in 1858 (Pl. 28), and Torredonjimeno, found near Jaén.⁴⁶ These crowns are too large to have been made for wear, but they were given to churches and cathedrals by royalty and wealthy ecclesiastics for suspension above the altar, following Byzantine practice and symbolising the dedication of the kingdom to Christ. The form of the crowns is based on Late Antique models, such as the pendent crown from Monte Barro, Italy, or the lost gold crown with a pendent cross of the Lombardic King Agilulf, dating from around 600.⁴⁷

In the early 7th century the Eastern Roman emperors introduced the custom of wearing crowns adorned with pearls and gems, and the style, techniques, and use of imported gems on the crowns from Guarrazar – sapphires, amethysts, emeralds, moonstone, crystal, glass, pearls and mother-of-pearl, as demonstrated in the paper by Drauschke – have been compared with Byzantine jewellery by Schlunk, Perea and others.⁴⁸ It is hard to imagine that metalwork of such a high standard could have been produced without the presence of Byzantine craftsmen in the Visigothic court workshops, as proposed by Schlunk and Ripoll López.

The richest of the Guarrazar crowns is the one dedicated by King Recceswinth (d. 672) and whose name is spelled out by the garnet-inlaid letters hanging from the lower edge (Pl. 29). The leaf-shaped links of the crown's chains (Pl. 30) may be compared with Byzantine jewellery, such as the 7th-century openwork, leaf-shaped pendant in the British Museum (Pl. 31; see also Entwistle, this volume, no. 47), although their quality is not as high. Furthermore, examination of the central pendent cross at the Museo Arqueológico has shown that it is, in fact, a re-used brooch that is most likely of Byzantine origin (Pl. 32).⁴⁹ With reference to the paper by Daim in this volume, it is perhaps, therefore, a further example of a diplomatic gift, which had been taken from the king's personal treasury.⁵⁰

The elaborate pendent cross of the earlier crown of Swinthila (621–31) was perhaps of similar origin (Pl. 33), although, since the crown was stolen in 1921 and never recovered, it is difficult now to be certain.⁵¹ But the scrolls of its arms bear comparison with, for example, the late 6th/early 7th-century gold saddle mounts from the Lombardic cemetery of Nocera Umbra, grave 5, Italy (Pl. 34), or the Byzantine earrings from Assiût, Egypt, in the British Museum (Pl. 35).⁵²

The two surviving, gem-encrusted plaques in the hoard from the arm, or arms, of a processional cross were probably originally mounted on a wooden base and a few minute garnets remain in some of the openings (Pl. 36). The plaques are thought to date from an earlier period than the crowns and



Plate 35 Earrings from Assiût, Egypt, London, British Museum (PE 1916,7–4,3–4)



Plate 36 Plaques with garnets from processional cross

the cross itself may have been a papal gift.⁵³ In the recent publication of the hoard by Perea, both the form and openwork technique of the decoration have been compared with a 4th-century trapezoidal gold mount with a Christian monogram in the British Museum from Silivri, Turkey (Pl. 37).⁵⁴ The ornamentation of the cross possibly served as a model for the crown of Recceswinth.

The Byzantinising style clearly apparent in Hispano-Visigothic jewellery, metalwork and sculpture appears to have served to legitimise the Visigothic successorship to the West Roman Empire in opposition to the Franks north of the Pyrenees, the other major contenders for the title, whose Merovingian dynasty continued in Germanic tradition and whose art still displayed animal symbolism of Germanic origin. The ubiquitous Hispano-Visigothic style may be fairly regarded as visual propaganda underpinning the extension of the idea of the *gens gothorum* (as mentioned in the acts of the Councils of Toledo and royal legislation) to the whole population of the Iberian Peninsula, both Roman and Gothic, in the course of the 7th century.

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Plate 37 Gold plaque with garnets, London, British Museum (PE 1980,5–1,1)

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Rethinking the Sutton Hoo Shoulder Clasps and Armour

Noël Adams

The kingly Anglo-Saxon ship burial in Mound 1 at Sutton Hoo is the richest and the most intact of all surviving barbarian assemblages from the Early Medieval period. The grave goods range in date from the late 5th century through the first decades of the 7th century and current scholarship tends to identify the wealthy burial with Raedwald, king of the East Angles who, according to the later historian Bede, ruled from c. 616 to c. 625 as overlord of the English kingdoms.¹ The grave is noted particularly for its assemblage of gold and garnet *cloisonné* ornaments, of which two pieces, the shoulder clasps, are the primary focus of this paper.

The majority of the gold ornaments at Sutton Hoo – the buckle, sword and scabbard fittings, belt mounts and purse lid – find parallels within the Germanic traditions which evolved in Europe, in some cases from 5th-century archetypes. The shoulder clasps, however, have no clear typological precedents, remaining at once the most refined and the most enigmatic of the gold regalia preserved in Mound 1 (Pl. 1).²

In his *magnum opus* on Sutton Hoo Bruce-Mitford illustrated the cuirass on a 1st century BC imperial portrait of Augustus (the Prima Porta statue) as a possible model for the clasps (Pl. 18 and Part III below).³ Despite his careful phrasing as to the relationship between the clasps and statue,⁴ this allusion to imperial armour continues to influence scholarly ideas about both the nature of the clasps and the concept of *imitatio imperii* which, it has been argued, is expressed by the grave goods in Mound 1 at Sutton Hoo.⁵ Immediate objections, however, may be raised to this parallel. The method by which the clasps were attached (by small loops on the reverse), for example, would not be compatible with Greek and Roman metal cuirasses and the possibility that the clasps simply copied a representation of an imperial Roman cuirass type⁶ is dubious on both chronological and technological grounds.

Bruce-Mitford's analysis of the function of the clasps was brief and, as we shall see, dilatory. The reasons for this are good ones, and many fundamental questions regarding these unusual objects may never be answered. Chief among these is the material to which they were attached and, although some possibilities may be eliminated, the original material will probably never be known. Despite this, the fact that the primary purpose of the clasps does seem comparable to the shoulder fastenings shown on classical cuirasses must be accounted for. A modern reassessment of the clasps, therefore, particularly with regard to their relationship to armour, seems in order.

The following discussion is divided into three sections. Following a résumé of the archaeological context of the clasps, Part I reviews the specific techniques used to create the clasps (*cloisonné*, *millefiori* and filigree), followed by a brief discussion of the iconography and possible prototypes for the form of the clasps. Part II focuses upon the attachment loops

found on the reverse of the clasps, examining parallels and the implications of different object types fastened in this manner. Finally, as the clasps are taken to represent armour or armour-related fittings, Part III re-evaluates the evidence for defensive body armour in the grave, including the actual mail as well as the hypothetical 'imperial' cuirass.

PART I

Burial deposition and description

The Sutton Hoo Mound 1 clasps were found in the grave at roughly the same level as the sword hilt, a half-metre or so west of the belt fittings (Pl. 2:1).⁷ Although the excavators had a clear sense that the helmet, sword and regalia (clasps, gold buckle, belt mounts and purse lid) were distributed in a fashion that suggested a body, no body was found.⁸ When first discovered, the excavator Charles Phillips identified the Sutton Hoo clasps as 'armlets';⁹ later Gamber and Bruce-Mitford argued that their curve was most suitable for wear on the shoulder,¹⁰ hence the sobriquet by which they are still known.

The clasps were found pinned together and close to one another with one clasp on its edge and the other flat and face up (Pl. 2:2).¹¹ On the 1939 field photographs, both pin heads are facing the same direction. Bruce-Mitford assumed, I believe correctly, that when the clasps were fastened in place on the shoulders the pins could only have been inserted from the outer edges. If buried in this position on the body the pinheads should have been facing in opposite directions. This discrepancy, and their close proximity (3.8cm apart), suggests their stance in the grave does not correspond to their original position on the shoulders (presumably at least 10–20cm apart).



Plate 1 Shoulder clasps, Mound 1, Sutton Hoo (PE 1939,1010.4–5), W: 5.4cm



Plate 2:1 View of shoulder clasps in the ground



Plate 2:2 Detail of shoulder clasps as excavated



Plate 3 Details of shoulder clasps

Other elements of the regalia, however, were also in ‘unnatural’ positions due to shifting or disturbance within the grave.¹²

In Volume I of the British Museum publication of Mound 1, Bruce-Mitford hypothesised that ‘the shoulder-clasps, detached from the garment to which they had once been fixed, had been placed together in the middle of an empty space where the body should have been’, admitting that the ‘placing of the shoulder-clasps... remains unexplained’.¹³ Although his text vacillates as to what the clasps may have actually fastened or have been fastened to,¹⁴ he personally felt they must have been fitted to a *cuir bouilli* cuirass.¹⁵ In light of the small attachment loops on the reverse, researchers have allowed for the possibility of textile in the equation, and most recently have doubted altogether the possibility of a hardened leather cuirass.¹⁶

The *cloisonné*, form and motifs

Each clasp consists of two symmetrical curved halves pinned together by meticulously engineered hinges, still in functioning order. The sophisticated design of each section – panels of stepped rhomboids, Germanic Style II interlace and crossed boars – is matched by flawlessly executed garnet *cloisonné*, *millefiori* glass and zoomorphic filigree (Pl. 3). Analysis of each of these elements in a meaningful way is beyond the scope of this paper but, as they were not investigated in depth by Bruce-Mitford, the following comments provide some background and dating evidence.

The ‘carpet’ of regular stepped cellwork on the main panels of the clasps may appear a rather straightforward geometric pattern, yet this is one of the most notable features of the clasps. The plate shape known as the ‘stepped rhomboid’ has been the focus of much discussion,¹⁷ but overall patterns assembled with these plates are relatively rare in the *corpus* of garnet *cloisonné*. This reflects to some degree the lapidary capabilities of different jewellers but also the availability of adequate numbers of well-matched stones,¹⁸ which tended to be restricted to goldsmiths working for high-status clients. In the context of the conference, the question of to what extent

these specifically represent a Late Antique or Byzantine tradition is worth reviewing, although the issue must remain unresolved.

Complete stepped rhomboid plates and patterns first appear on elite sword fittings deposited in the middle decades of the 5th century. The distribution of these is, with one exception, wholly western,¹⁹ but Arrhenius’ hypothesis that the *seax* scabbard mouthpiece with linked stepped rhomboids found in the burial of King Childeric at Tournai (d. 481) (Pl. 4:1) was made in Constantinople has been influential on recent scholarship.²⁰ I have argued that such plates may have been developed as an expedient means of decorating multiple weaponry fittings, not impossibly in association with the *fabricae* of the Roman Empire,²¹ but, as the manufacture of arms and their decorative fitments could have taken place in different places, at present there is no way of determining where such *cloisonné* workshops may have been located, or indeed whether the goldsmiths were fixed or peripatetic. Weapons with this particular *cloisonné* cellwork found their way into Hunnic hands as well (Pl. 4:2)²² – whether this suggests production by jewellers working for clients on the Danube during the Hunnic occupation of Pannonia or simply demonstrates the trajectory of trade and control from the Eastern Roman Empire likewise remains unknown.

Stepped rhomboids do not at present feature on the *cloisonné*-ornamented swords with gold hilts found in Merovingian graves in the period from c. 480–520/25, which, it has been argued, are local imitations of ‘Byzantine’ prototypes.²³ The immediate predecessors to the shoulder clasp decoration are found in the next phase of production, on *cloisonné* sword pommels.²⁴ The earliest of these, a pommel with single stepped rhomboids on both faces, was found in the rich grave of a Frankish leader at Krefeld-Gellep on the lower Rhine (Grave 1782), deposited in the second quarter of the 6th century.²⁵ Two other examples, from Stora Sandviken (Stürko, Blekinge) (Pl. 4:3) and Väsby (Hammarby, Uppland) in Sweden, incorporate patterns of linked stepped rhomboids; these were made and deposited, on current evidence, in the period from 560/70 to 600/610.²⁶ Arrhenius argued that the



Plate 4:1 Seax scabbard mouthpiece, tomb of Childeric, Tournai, Belgium; L: 7.3cm

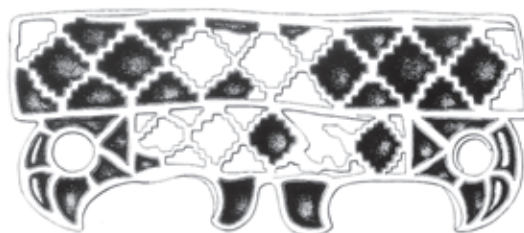


Plate 4:2 Sword mouthpiece and scabbard, Voshod (Engels-Pokrovsk), Russia; L: approx. 9.5cm

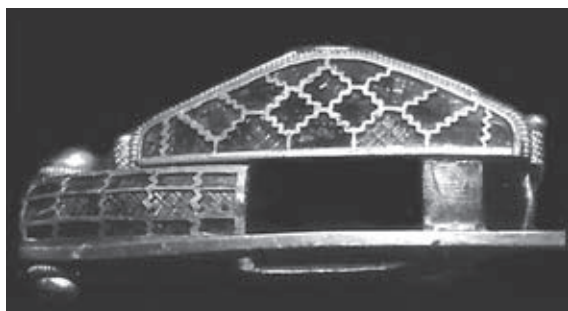


Plate 4:3 Pommel, Stora Sandviken, Sweden; L: 7.3cm



Plate 4:4 Buckle, Ostrogothic period; L: (buckle-plate) 5.9cm



Plate 5:1 Pair of rectangular belt mounts, Mound 1, Sutton Hoo (PE 1939,1010.8-9); L: 5.2cm

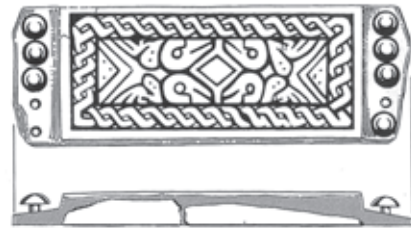


Plate 5:2 Belt mount, Grave 7, Rödigen, Germany; L: 5.2cm

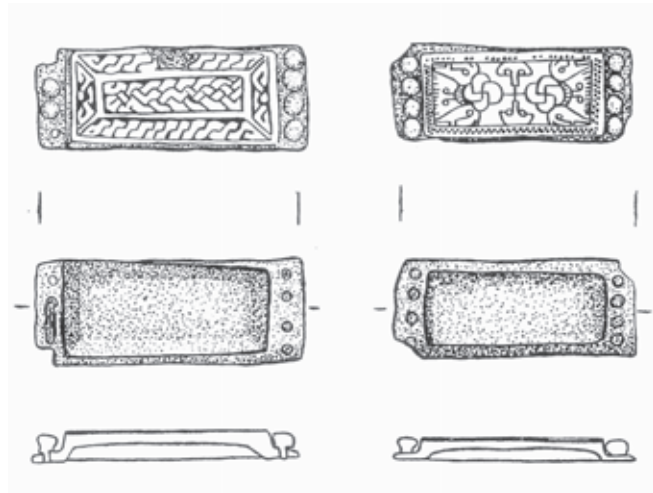


Plate 5:3 Belt mounts, Grave 127, Schretzheim, Germany; L: (largest) 5cm



Plate 6 Buckle counterplate, Kerč, Crimea; H: 4.2cm



Plate 5:4 Belt mounts, strap distributor and buckles, Mound 1, Sutton Hoo

pommels preserved in Sweden were made in Frankish workshops,²⁷ but pommels of this class have been found in Gotland, Finland, England, Bavaria and Italy²⁸ so their place of manufacture is uncertain. It is possible that the *cloisonné* pommels preserved in Scandinavia reflect workshop traditions originating in Italy, where Ostrogothic burial customs prohibited the inhumation of weaponry but where high-status female jewellery made in the first half of the 6th century displays large examples of these plates (Pl. 4:4).²⁹ Stepped rhomboids were also used on the famous gold liturgical paten, buried at Gourdon (Saône-et-Loire) sometime after 525,³⁰ so jewellers producing or using these plates also worked for ecclesiastical clients. The current picture, therefore, suggests that stepped rhomboids were relatively rare and restricted to high-status ornaments throughout the 6th century. The maker of the Sutton Hoo shoulder clasps had access to enough garnet to prepare both large and small stepped plates (16 at approx. 6.5 x 6.5mm and 14 at approx. 5 x 5mm) of the same general size as those on the pommels preserved in Sweden.

Stepped rhomboid garnet plates of the smaller size were also displayed individually on one pair of rectangular mounts from the sword belt found in Sutton Hoo Mound 1 (Pl. 5:1), on the dummy buckle (Pl. 5:4) and are found on at least two *cloisonné* pommels from the Anglo-Saxon hoard recently discovered in Staffordshire.³¹ The two Sutton Hoo belt mounts share another feature with the clasps – cells filled with gold or covered by a sheet of gold (see below), used on these in combination with elbow-shaped plates to create a rope-twist interlace around the border. Belt mounts of this form, generally made in gilded copper-alloy with inset nielloed silver panels, are useful as dating indicators. Borders of simple rope twist interlace, for example, appear on rectangular belt mounts of Type Weihmörting found in a rich Frankish chamber grave at Rödingen (Nordrhein-Westfalen, Grave 7)³² (Pl. 5:2) and in Grave 127 in the large Alamannic row-grave cemetery at Schretzheim (Kr. Dillingen a.d. Donau) in Bavaria (Pl. 5:3).³³ Both belt sets included mounts with boar heads at the corners; as Koch noted, both the rope interlace and boar decoration are rare.³⁴ Grave 127 in the Schretzheim cemetery belonged to the phase of deposition dated from 565–590/600; Rödingen Grave 7 has recently been assigned to phases 6 and 7 of the cemetery (c. 570–610).³⁵

The other Mound 1 belt mounts, sword belt strap distributor, buckle and dummy buckle are decorated with interlocking *cloisonné* cellwork of a somewhat different nature (Pl. 5:4). Patterns similar to these, using clusters of elbow and mushroom-shaped cells to create focal quatrefoils, however, also appear on objects deposited in the last third of the 6th century, notably on iron belt buckles decorated in *Tauschierung* (metal inlaying) found in high-status Alamannic and Frankish warrior graves.³⁶ It has been suggested that the introduction and spread of the technique of inlaying silver and gold into iron in Europe was due to the transmission of Byzantine objects through Lombardic Italy,³⁷ but it is unknown whether the decorative patterns were also imported or whether existing *cloisonné* objects were being copied. Stepped rhomboids do not at present appear on Type Weihmörting belt mounts and are rare in inlaid ironwork.³⁸ Recent garnet *cloisonné* finds from Staffordshire, England, however, confirm that patterns incorporating small mushroom and small rhomboid cells were

contemporaneous (see note 31). On the basis of their relationship to the Vendel sword pommels and to one pair of the belt mounts, it may be suggested that the Sutton Hoo clasps were produced in the period from 560/70–600/610, perhaps, given the size of the garnets, on the earlier end of this time frame.

The integration of glass into the ‘carpet’ of rhomboids recalls Ostrogothic-period traditions, taken to new heights of luxury with *millefiori* glass. Bruce-Mitford argued that the chequered red, blue and white blue *millefiori* implied the presence of Celtic craftsmen,³⁹ but scientific examination of the *millefiori* inlays in the British Museum Research Laboratory established that they were compositionally different to contemporary Celtic *millefiori* glass.⁴⁰ The canes include a rare translucent red glass coloured by manganese, similar to that found on glass tesserae used on Roman wall mosaics, and there is little doubt that they were made using recycled Roman glass.⁴¹ The source and place of manufacture of the *millefiori* canes, however, remains unknown, although continental Europe must be considered a strong possibility.⁴²

Framing the stepped garnet and *millefiori* glass rhomboids on the inner rectangular panels of the Mound 1 clasps are interlaced Germanic Style II zoomorphs, inlaid in garnet and blue glass against a gold ground. Like the boar figures, these are defined by garnet plates freely-cut to individual shapes. The interlaced snaky creatures with large eyes find parallels in garnet *cloisonné* found in Anglo-Saxon England and Frisia.⁴³ The components of Anglo-Saxon Style II have never been subjected to rigorous dating analysis, but it is clear that the shoulder clasp zoomorphs can be associated with the first phase of Style II, Høilund Nielsen’s Phase D (565/80–610/30).⁴⁴ Speake noted some general stylistic similarity with the nielloed creatures on the silver harness mounts from Grave 9 at Niederstotzingen in Bavaria and the placement of the eye at the top of the head may also be compared to the zoomorphs on the Crundale Down (Kent) pommel and Allington Hill (Cambs.) escutcheons;⁴⁵ these, however, lack the angled jaw which is a prominent feature of the Sutton Hoo material and which has Scandinavian parallels.

The technique in which the interlaced zoomorphs are executed, relying upon large and small areas of gold sheet to realise the pattern, was described by Bruce-Mitford as ‘lidded’ or ‘beaded’ cells; the device appears on other Anglo-Saxon, Frisian, Frankish and Vendel Swedish garnet *cloisonné*.⁴⁶ *Cloisonné* interlace executed in this manner, in the form of cable twist, also appears on a buckle counterplate from Kerč in the Crimea, originally set with garnet plates (Pl. 6).⁴⁷ This can be dated to the last decades of the 6th or first decades of the 7th century, a reminder that what Bruce-Mitford took to be a rare and specialised western technique was also practiced in the Byzantine-influenced East.

Finally, the zoomorphic filigree found in the interstices between the boars’ legs, like the Style II zoomorphs, finds parallels within insular and Scandinavian traditions.⁴⁸ The designs of the filigree differs on the two clasps; like the subtle differences in the length of the sections of the hinges, this was clearly deliberate and in keeping with ancient and medieval jewellery production which tended to regard perfectly matched pairs as inauspicious.

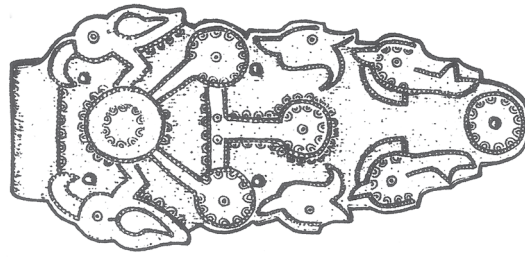


Plate 7 Vessel mount, Grave 119, Kölked-Feketekapu B, Hungary; H: 8.7cm

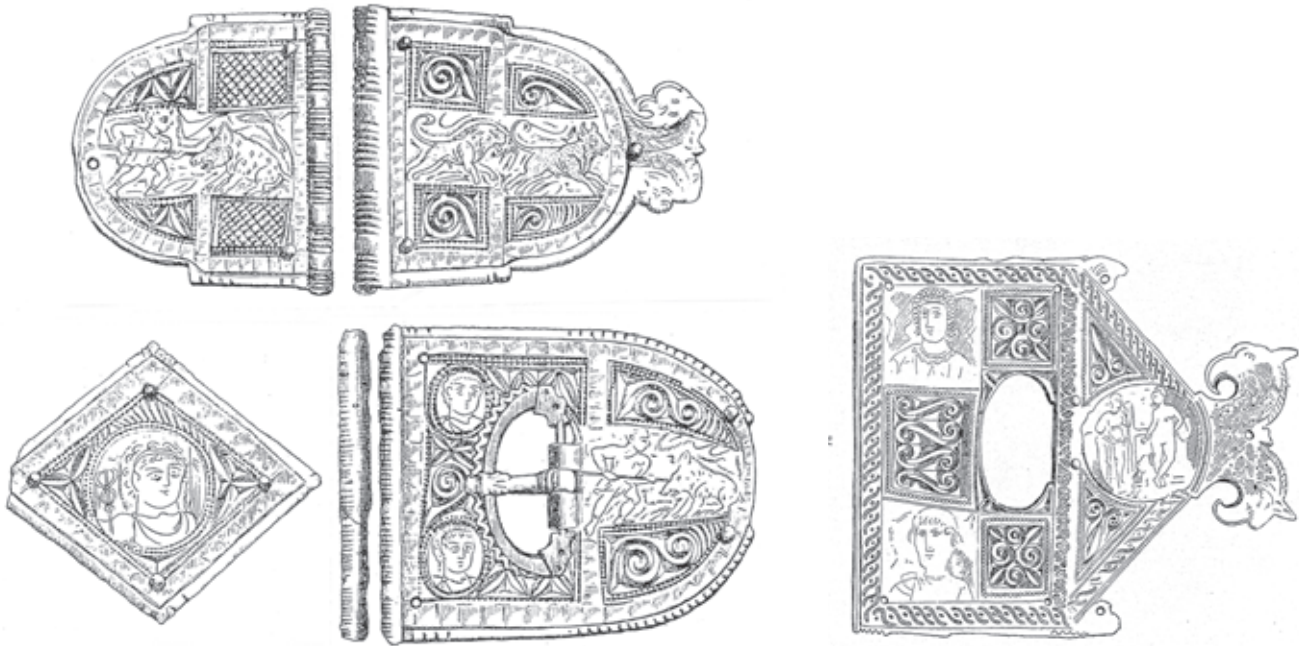


Plate 8:1 Muthmansklopp type belt mounts, ?Dunapatale, Hungary; L: (of mount with eagle heads) 5.1cm

Plate 8:2 Muthmansklopp type belt mount, ?Rome, Castellani collection; L: approx. 11.5cm

The primary motif of the shoulder clasps is, of course, the magnificent figures of crossed boars on the arched panels. These incorporate large chequerboard *millefiori* inlays at their shoulders and include some of the largest garnet plates found on the Sutton Hoo jewellery. The boars undoubtedly had particular significance to their owner, which we can only attempt to define. In Britain the boar often had an expressly military significance which can be traced over centuries, from its use as the symbol of the *Legio XX Valeria Victrix* (which invaded Britannia in AD 43 with Claudius)⁴⁹ to the actual boar tusk ornaments found at the Late Roman fort at Richborough⁵⁰ to the later 7th-century boar-crested helmets preserved at Benty Grange and at Woolaston.⁵¹

In the late 6th and early 7th centuries the *cloisonné* sword pommels found in Sweden incorporated cryptic representations of boars and hounds (Hög Edsten, Bohuslän) and boar heads (Vallstenarum, Gotland) and a mid-6th-century continental silver and niello pommel included in the Staffordshire Anglo-Saxon hoard is decorated on one side with addorsed zoomorphs with boar heads at the corners.⁵² The complete crossed boars on the shoulder clasps remain unparalleled, although the paired treatment is in keeping with imagery of the period. Small copper-alloy mounts in the form of conjoined boars, for example, were used on *seax* belts found in Alamannic and Frankish graves from the last third of the 6th century through the first two decades of the 7th century.⁵³ In addition a wide range of fittings decorated with paired boar

head motifs, often in association with double eagle heads and sometimes the heads of hounds as well (Pl. 7),⁵⁴ were a key part of the repertoire of high-status jewellery and ornaments used by the Germanic elites in Europe, England and Scandinavia in the later 6th and first half of the 7th centuries. Individually these animals were associated with Germanic deities, but their combination derived from classical hunting imagery and their conjoined form evolved from ancient steppe conventions.⁵⁵

In comparison with many of these, the complete boars on the Mound 1 clasps are, given the constraints of cold *cloisonné* and the space into which they are compressed, remarkably realistic. Yet their crossed position, with their hind legs and snouts touching the ground and front legs dangling in the air, contrasts with both Roman and medieval images of boars, which typically show the beasts running, leaping or seated. Possible interpretations of this position are that the boars are fighting, dead⁵⁶ or that boar skins are represented.⁵⁷ Whether seen as battling animals or trophies of the hunt, these boars have been transformed into a specific visual signal. Such an emblem might have been purely personal, tribal or may have had a more formal role as an 'official' insignia.

These lines of reasoning acquire further relevance when we examine the unusual overall shape of the clasps – a rectangular panel surmounted by an arch. This form can be paralleled on a class of Late Roman belt mounts known as the Muthmansklopp Type, after a find in Austria.⁵⁸ Mounts of this type were engraved with panels of sophisticated figural imagery in

combination with chip-carved ornament. Mounts said to have been found in Dunapentele, Hungary, depict boar hunts between crosshatched panels (Pl. 8:1) while an exceptionally large example, said to have been found outside Rome, incorporates borders of cable-twist interlace and adorsed griffin heads (Pl. 8:2).⁵⁹ Others of this type are decorated with circus motifs, pagan and Christian figural themes.⁶⁰ The figural style and type of portrait medallions on these mounts date the Muthmanskopf type to the last third of the 4th and first decades of the 5th century.⁶¹

Unlike other chip-carved belt sets found in the graves of Germanic officers serving in the Late Roman army, no Muthmanskopf mounts have been excavated *in situ* in a grave.⁶² Examples are distributed along the Rhine and Danube frontiers, with outliers in Italy, Anglo-Saxon England and North Africa and we know nothing of the places of production of these large and sophisticated figural mounts.⁶³ Some seem to be personalised with portraits of a helmeted soldier and a woman (?his wife)⁶⁴ and it is possible that they had connotations of civil as well as military rank in the Late Roman bureaucracy. These buckles and their matching counterplates provide one possible model for the form as well as the motifs of the Sutton Hoo clasps, with the boar hunting motifs condensed and stylised, the geometric panels of cross-hatching reinvented as stepped rhomboids and the guilloché borders transformed into zoomorphic interlace.

I have argued elsewhere that the revival of Late Roman forms formed a key part of the early Anglo-Saxon aesthetic response to their Germanic and Roman past.⁶⁵ As for the relevance of animals of the hunt (if this is what the boar motifs indeed signify) to a high-status warrior in the later 6th century, we need only to turn to the Early Byzantine military manual, the *Strategikon*, where hunting from horseback is described as a complementary discipline to warfare, keeping men alert, exercising their animals and teaching them tactics.⁶⁶

Although we might propose that the form and decoration of the Sutton Hoo clasps may be traced back to Late Roman official belt sets, the archaeological evidence does not allow us a clear understanding of such an evolution, or functional transformation. Some further insight into the development of these mounts is offered by an examination of the loops on the backs of the clasps, a neglected feature which finds parallels in high-status Byzantine-period objects in this period.

PART II

Looped versus pinned attachment systems

The Sutton Hoo clasps were affixed by means of narrow loops of 1.2mm gauge wire on the reverse; each pair has 20 of these, arranged in parallel rows. Each loop measures approximately 3mm in length with an internal opening of approximately 2.0–2.5mm (Pl. 9).⁶⁷ The workable opening of the loops is so narrow that modern mounting pins measuring 0.5mm in diameter, when sleeved with plastic, fit snugly within them. The slight ‘halo’ visible around the loops on the reverse of the central rows of one of the Sutton Hoo clasps may be evidence that the loops had individual fastenings and Bruce-Mitford apparently considered the possibility that each loop could have been secured by a pin, but, as nothing of this sort survived in metal, concluded that they must have been sewn into place against

leather or textile.⁶⁸ The clasps weigh 183.80 and 201.57g, however, and would be difficult to secure with anything other than stout cord.

In this instance much later 17th- to 19th-century ornaments with loops on the reverse, widespread from Central Asia and the Caucasus to Hungary and Scandinavia may offer some guidance. Although rows of looped ornaments could be secured by a single thin leather thong or textile cord,⁶⁹ other looped mounts were traditionally secured by individual short strips or splints of leather.⁷⁰ These were inserted when the leather was fresh and malleable so that as they dried and hardened the ends expanded and held the object securely in place.

As we shall see, multiple attachment loops on the back of objects can be documented throughout the 1st millennium on high-status gold ornaments. Although single long loops were commonly used to fasten gold mounts sleeved with shell collars onto continental and Anglo-Saxon scabbards,⁷¹ multiple reverse loops for attachment are much rarer. The great majority of metal fittings made in England in the late 6th and 7th centuries followed the established Roman and Germanic norm of mounting with dome-headed rivets. By the early 6th century in the Byzantine East such riveted systems were replaced by integral cast lugs, pierced at the end; these became the primary method of attachment on belt buckles and other ornaments. Lugged mounts begin to appear on belt buckles in continental Europe and Anglo-Saxon England in the later 6th century.⁷² The rarer looped attachments appear briefly in the West on Late and post-Hunnic period ornaments in the 5th century and then re-occur in increasing numbers from the second half of the 6th century.

Small attachment loops were originally a feature of steppe nomadic metalworking, but were in use in western goldsmithing at least as early as the Hellenistic period.⁷³ In the case of precious metal fittings, round or strip wire was folded into a loop whose ends were then soldered to the backs of decorative mounts or functional buckles and clasps. Once in place objects held by multiple loops were very secure, but at the same time this system, unlike the riveted one, permitted



Plate 9 Shoulder clasps, reverse and side views; W. 5.4cm



Plate 10:1 Belt mount, Kunágota, Hungary; H: 4.2cm

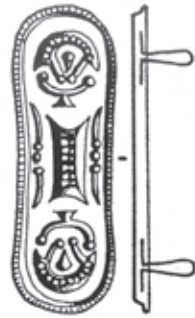


Plate 10:3 Strap mount, Grave 90, Castel Trosino, Italy; H: 4.4cm

greater flexibility in elite dress, allowing ornaments to be added to an existing garment or belt, or removed, for cleaning, repair or transfer to another outfit. The following discussion reviews the three primary types of functional fittings with reverse attachment loops: buckles, hook and eye clasps and hinged clasps.

Buckles

Although a *cloisonné* buckle with loops on the reverse was found in a Late Sarmatian period grave of the second half of the 3rd or early 4th century,⁷⁴ the majority of surviving buckles and belt mounts with loops appear in contexts dated to the second half of the 6th and 7th centuries. In addition to high-status gold buckles of undoubted Byzantine type or origin,⁷⁵ variants in silver⁷⁶ and copper-alloy⁷⁷ have also survived. Early coin-dated examples in the West include the belt set found in an Early Avaric rider's grave at Kunágota, Hungary with a *solidus* of Justinian I (545–65) (Pl. 10:1 and Daim this volume, Pl. 5)⁷⁸ and a gold buckle in a female grave at Perugia buried with 140 coins of Justin II with a *terminus post quem* of 578.⁷⁹

In the middle decades of the 7th century elaborate gold buckles and belt mounts with attachment loops are found in Middle Avaric and Bulgar contexts of the highest status, for example the khagan's belts from Kunbábony,⁸⁰ Sirmium (Pl. 10:2)⁸¹ and Mala Perešćepino,⁸² as well as the high-status male grave at Bócsa.⁸³ Such buckles seem to represent a fusion of steppe nomadic traditions with Byzantine-period goldsmithing techniques, but not necessarily actual Byzantine workmanship.⁸⁴

Between these benchmarks we find examples of gold and silver sheet buckles and strap mounts with loops (in some cases for horse harness) primarily in Lombardic graves in Italy (Pl. 10:3).⁸⁵ Some of these reflect types which are archaeologically

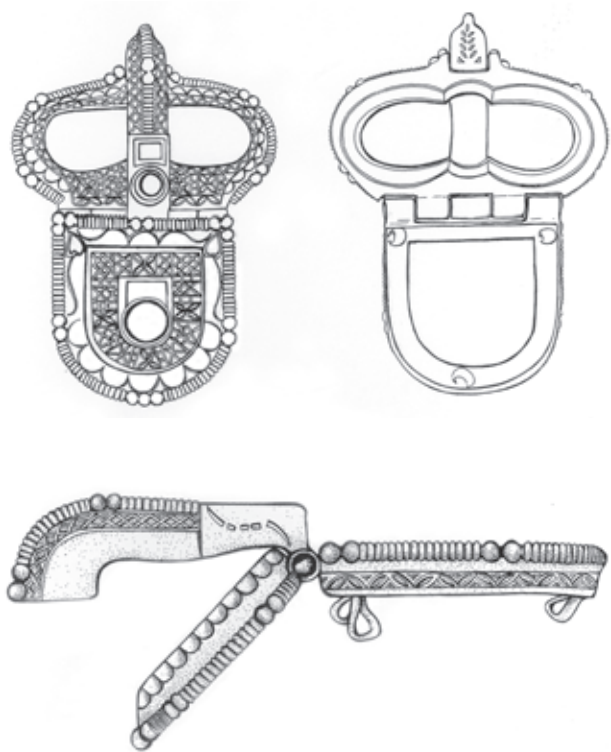


Plate 10:2 Buckle, Sirmium (Sremska Mitrovica), Republic of Serbia; L: 8.1cm

distributed across Byzantium, Sasanian Persia and the northern steppe zone where mounts with multiple loops were also being made.⁸⁶ They are not, however, imports, but native Lombardic variations, in some cases manufactured in the *Preßblech* technique using dies which copy eastern prototypes.⁸⁷ Their Alamannic counterparts found north of the Alps were for the most part made in baser metals or were constructed with riveted pins.⁸⁸ Further north, in core Merovingian territories, loops can be documented only rarely, on high-status mounts such as those excavated in Grave 11 at Saint-Denis.⁸⁹

In Anglo-Saxon England another pair of clasps with attachment loops survived in a large, male, barrow grave at Taplow in Buckinghamshire (Pl. 11); the grave goods in this deposit range in date from the second half of the 6th to the early 7th century.⁹⁰ The character of the burial is not dissimilar to that of Mound 1 at Sutton Hoo, although its monetary wealth, in terms of the gold deposited, is considerably less. The Taplow clasps differ from the Sutton Hoo clasps in significant ways,⁹¹ but a brief examination of these and their antecedents establishes another means by which we can begin to unravel possible prototypes for the Sutton Hoo clasps.

The Taplow clasps

The Taplow clasps were found in a textile sandwich and orientated, according to the most reliable plan, one above the other alongside the body with the two halves angled together but probably not articulated.⁹² They were attached to patterned leather and associated with a textile of red tabby wool.⁹³ The contents of the barrow were greatly disturbed but a few surviving bones and the position of the grave goods suggested the body was orientated with the head to the east⁹⁴ with the clasps located on the left-hand side.



Plate 11 Front and reverse of pair of hook and eye clasps, Taplow (Bucks) (PE 1883,12-14.2); W: 2.9cm

The clasps are made of copper-alloy covered with gold sheet. Each clasp has three wire loops on the reverse, positioned at the shoulders and toe (**Pl. 11**). These were inserted from the back through the gold sheet and copper-alloy plate with the ends hammered down and disguised by the inlays in the circular cells at the corners.⁹⁵ Although made of less robust wire (1mm thick) than the loops on the Sutton Hoo clasps, their opening is actually slightly larger (2.5–3mm). The clasps were made with one half terminating in a fixed loop and the other fashioned with a hook. Each element resembles a triangular buckle plate, yet they must have served a different function to that of a buckle. This is indirectly confirmed by the orientation of the loops on the reverse of the clasps whose openings are all orientated in the same plane, in contrast to buckles whose loops (or lugs) were set with the toe loop perpendicular to the others, presumably for greater stability. Functionally therefore the Taplow clasps can be seen as unique variants of hook and eye clasps, an object type in use throughout the 1st millennium which was also typically secured by means of reverse loops.

Hook and eye clasps

In contrast to the elite male buckles and mounts reviewed above, hook and eye clasps have survived primarily in female grave contexts. Early examples of these excavated *in situ* in 1st-century royal nomadic burials at Tillya Tepe, Afghanistan, show that they were worn either at the chest or neck to close both long sleeved robes and shorter capes or cloaks worn over the shoulders (**Pl. 12:1**).⁹⁶ A lobed hook and eye clasp found in a disturbed 2nd-century burial in Tomb 7 at Mcheta (Republic



Plate 12:1 Gold disc-shaped clasps, Tillya Tepe, Afghanistan; Diam: 3.3cm

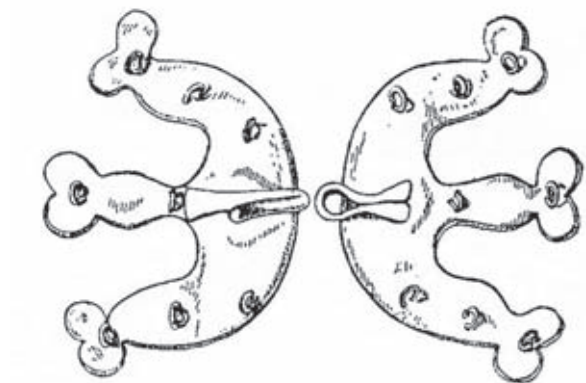


Plate 12:2 Gold, garnet and turquoise clasps, Grave 7, Mcheta, State Museum of Georgia, Tbilisi, Republic of Georgia; W: 5cm

of Georgia) provides evidence that similar garment fastenings were worn on the north-western border of the Parthian Empire (**Pl. 12:2**).⁹⁷ Although this was a female grave, Musche has suggested the clasp represents a type of male cloak fitting.⁹⁸ A disc-shaped hook and eye clasp in the State Museum of Georgia was decorated in the new fashion of garnet *cloisonné*, probably in the later 4th century (**Pl. 12:3**),⁹⁹ while an unprovenanced pair of quatrefoil-shaped clasps in silver has been considered Sasanian work of the 5th century,¹⁰⁰ suggesting continuity of these particular garment fastenings in Persia.

I know of no evidence of hook and eye clasps in the Late Antique Roman world, unless we entertain Werner's suggestion that the small pair of semi-circular mounts with loops on the



Plate 12.3 Gold and garnet *cloisonné* disc-shaped clasp, State Museum of Georgia, Tbilisi, Republic of Georgia; Diam: 2.1cm

reverse from the 5th-century tomb of King Childeric at Tournai (Pl. 13, bottom) fastened a sleeveless fur jacket such as that which Sidonius Apollinaris described as worn by the Burgundian Prince Sigismar.¹⁰¹ These lack hooks and eyes but may well offer some evidence about garment fashions in the Late and post-Hunnic periods. Current scholarship views many of the garnet *cloisonné* fittings and weapons buried with the Frankish king as reflecting Eastern Roman types if not necessarily workmanship.¹⁰² Other ornaments in the grave, such as the bee or cicada mounts and the ox mount, were also made with single or multiple loops on the back.¹⁰³ Clearly loop fasteners already formed part of the repertoire of high-status Late Antique goldsmiths in the 5th century, even though there is little evidence of these outside this barbarian deposition in the West.

Hook and eye clasps secured by loops re-emerge in the archaeological record in the 7th and 8th centuries in Avaric and Lombardic material cultures in Europe. A considerable number of these have been preserved¹⁰⁴ and it has been argued that the earliest group of Avaric disc-shaped mounts made in the first half of the 7th century imitate both Byzantine



techniques and decoration.¹⁰⁵ An unpublished clasp in the British Museum (PE 1916,2-11.2) has empty *cloisonné* cellwork comparable to that on the strap end and belt mount from Kunbábony and the strap end from Bócsa,¹⁰⁶ i.e. from the middle decades of the 7th century. The British Museum clasp has no known provenance, but was considered Lombardic when acquired. When excavated *in situ*, the majority of 7th-century Avaric clasps have been found at the jaw, neck and shoulder, indicating that, they, too, were used to close a garment at the neck or upper chest.¹⁰⁷

To return to Anglo-Saxon England, the combined evidence suggests that identification of the Taplow clasps as belt fasteners worn one above the other¹⁰⁸ must be reconsidered. The clasps could not be adjusted (a key requirement for a waist belt) so their putative belt would have to have been worn very tightly to maintain horizontal tension on the loops. It is probable therefore that the triangular buckle in the Taplow grave served as the primary waist buckle rather than as a baldric buckle, as its disturbed position in the grave has suggested. Furthermore, the red-dyed wool tabby fragments associated with the clasps are most convincingly interpreted as a garment rather than a belt.

It may be significant here that the hook on one of the Taplow clasps is torqued and damaged. This could be explained if the clasps were subjected to different tension at different levels. This might occur on a central closing of a cloak if it was very tight, but is perhaps more likely on a coat closing with a flap. Long-sleeved overgarments with flaps crossing from right to left, a type which evolved from steppe nomadic riding



Plate 13 Colour version of Chifflet 1655 drawing of mounts from tomb of Childeric at Tournai, Belgium



Plate 14 Gold and garnet *cloisonné* hinged mount or buckle plate, Ureki, State Museum of Georgia, Tbilisi, Republic of Georgia; L: 4.8cm

garments, were introduced into the Byzantine East in the 5th or 6th century.¹⁰⁹ Two distinct types survive in the archaeological record: those with a cut-away rectangular flap at the front (*Brustklappe*), known from the fragments of red and green coats found at Antinoöpolis in Egypt¹¹⁰ and those with an angled flap (essentially the kaftan), best known from an 8th-century find in the Caucasus.¹¹¹ Such coats were traditionally closed by means of 'frogs', loops with fabric knots, but the excavator of Antinoöpolis, Albert Gayet, recorded amongst the groups of fabrics, unfortunately without any specific assignment or context, 'agraffes de manteau' of bronze and iron.¹¹²

The conception of a coat with hooks for quick easy closure on the edges of a flap, finished with a band of gold braid offers one satisfactory interpretation of the function of the Taplow clasps. Whether the cut of the red wool tabby cloth in the grave imitated these eastern garments must remain unknown but the attachment loops on the reverse of the clasps reflect familiarity with Early Byzantine period goldsmithing techniques so this is a possibility. We do not know whether the clasps themselves copy eastern forms lost to us or represent a local innovation based upon known buckle types; in any case their Anglo-Saxon origin is reflected in the local and competent Style II ornament with which they are decorated. We might suggest that a similar fusion of influences also define the character of the Sutton Hoo shoulder clasps.

Hinged clasps with loops

Seen within the continuum outlined above, the Sutton Hoo shoulder clasps demonstrate a similar working knowledge of Byzantine goldsmithing techniques, best documented and dated by finds in Avaric Central Europe and Lombardic Italy. Unlike the Taplow clasps, however, there is no object typology into which we can slot the shoulder clasps. The only clue as to the existence of an object type related to the Sutton Hoo clasps is a group of hinged clasps which survive on the eastern borders of Byzantium. Although we cannot trace a clear link in the archaeological record between these objects and the Mound 1 shoulder clasps, their existence cannot be ignored.

The earliest hinged mounts were perhaps associated with buckles or baldric straps, although we cannot be sure of this as they are without context. A *cloisonné* mount found at Ureki in western Georgia was either married to a buckle loop or formed half of a symmetrical clasp (Pl. 14); it was part of a group of stray finds dating to the late 3rd or first half of the 4th century.¹¹³ It is also possible that the famous Wolfsheim 'pendant', found in a warrior grave of the early 5th century, constituted one half of a hinged mount, perhaps from a sword belt or baldric.¹¹⁴ The epigraphy of the early Pahlavi script on

the reverse of this piece dates it to the 3rd century or first decades of the 4th century.¹¹⁵

Recently a complete hinged gold ornament has come to light in a late 5th to 6th-century eastern Hunnic male tomb at Boma, in Xinjiang province in north-western China (Pl. 15).¹¹⁶ Although the inlays are lost, this too was most probably set with garnets in a technique related to *cloisonné* using a cut-away framework over paste; the cell shapes suggest the inlays were long rectangular plates or cabochon bars, similar to those in use on Byzantine sword guards in the 5th century.¹¹⁷ The pin appears removable but available illustrations do not clarify whether the piece was attached by rivets or loops.

A series of hinged clasps with loops on the back have been found in 5th-century depositions in the northern Caucasus (Pl. 16:1–3). Two variants of these are known, one with two rectangular plates (Pl. 16:1) and the other with semi-circular plates, hinged to form a disc (Pl. 16:3).¹¹⁸ These are made of robust sheet gold covered with empty cellwork; some examples are decorated with a strip of crude garnet *cloisonné* along the median, disguising the hinge. Only one published example has been excavated in context, in Grave 5 at Giljač (Karačaevo-Čerkessia) on the upper reaches of the Kuban in the north-central Caucasus (Pl. 16:2).¹¹⁹ The skeleton was in a flexed position on the right side with the hinged clasp below the left shoulder. The grave goods, which included two *fibulae* of Ambroz Type I and IA, suggest a date for this female grave in the late 4th or first half of the 5th century.

Two further clasps were recovered from burial no. 10 in catacomb grave 2 at Lermontovskaja in the Kislovodsk Basin (Stavropolskij kraj), in the north-central Caucasus.¹²⁰ The clasps were found in the upper levels of the soil filling the chamber of the grave without any specific association. One is decorated with a scale pattern of cellwork and a strip of triangular inlays while the cellwork of the other resembles the Giljač example (cf. Pl. 16:3). The disturbed burial contained the bones of three individuals, two male and one female, presumed to be an Alan leader, his wife and child. The grave goods were a complex mixture of Alanic, Hunnic and Germanic artefact types, with imported glass and beads from the northern shores of the Black Sea; they were deposited over a period of time from the second half of the 5th century into the first half of the 6th century.¹²¹

The precise function of these hinged clasps remains obscure. The two sections are movable on hinges which were fastened by means of bronze or iron pins; these are corroded on the examples seen by this author and may or may not have been removable. The loops are made of flat strip wire with relatively narrow openings, suggesting they are likely to have been attached to textile. It seems likely that they were garment fitments worn at the chest or shoulder, but on current evidence this is impossible to specify.

No examples have been found with inlays on the main panels and it is possible they were never set with stones, although the cross-shaped and scale cellwork copies known 5th-century *cloisonné* patterns. This may reflect their manufacture in a relatively remote area where garnet supply may have been a problem and goldsmiths lacked the lapidary skill necessary to cut garnet plates. A more sophisticated hinged double plaque with garnet *cloisonné* in a mosaic-style pattern was found in a high-status 5th-century male burial in a



Plate 15 Hinged gold fitting, Boma, Xinjiang, north-west China; L. 7.4cm

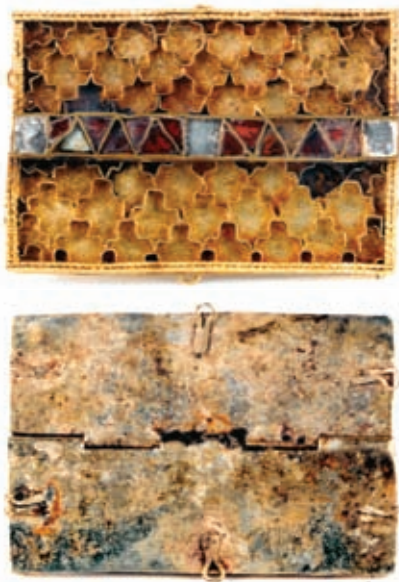


Plate 16.1 Rectangular gold, garnet and glass *cloisonné* hinged clasp (Thaw Collection, on loan to the J. Pierpont Morgan Library, New York); L: 6.3cm



Plate 16.3 Disc-shaped gold clasp, London art market; Diam: 7cm

kurgan at Kudenetov (Kabardino-Balkaria) in the north-central Caucasus (Pl. 17),¹²² it was not excavated so its position and function remain unknown.

It is possible that these hinged fittings reflect wider Byzantine traditions in the same manner as the garnet and glass sword guard in Lermontovskaja burial 10, which is a variant of a type found on swords considered to represent Eastern Roman weaponry.¹²³ Kazanski and Mastykova have argued convincingly that the luxury finds from Kislovodsk are evidence that this particular valley was the power base of an Alan elite allied with Byzantines. From this region they may have controlled one section of the Silk Route which ran east from Sebastopolis across the territory controlled by the Abkhazians to the Kuban and then to Kislovodsk.¹²⁴ In this period the eastern Black Sea littoral stretching from modern Krasnodar through Abkhazia and including western Georgia was occupied by subjects and allies of the Byzantines – the



Plate 16.2 Grave 5, Giljač, Republic of Karačaevo-Čerkessia, Russia

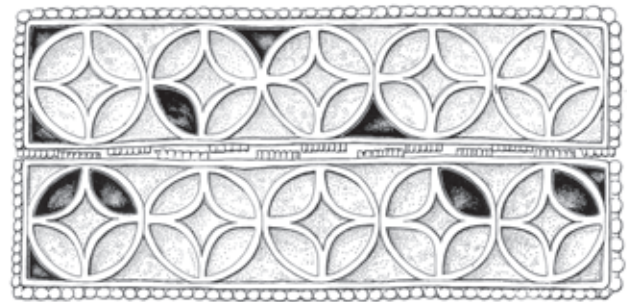


Plate 17 Hinged mount (?clasp), Kudenetov, Republic of Kabardino-Balkaria, Russia; L: approx. 12.3cm

Christian Lazi and the Caucasian tribes subject to them: the Savarians, Abasgi and Apsilii (Procopius, *De Bello Gothico*, VIII. iii-iv; Agathias, *Histories*, II.18.6, III.1.5).

At present there are more questions than answers regarding the emergence and purpose of these 5th-century hinged fittings, which, in any case, provide only a generic background for the Sutton Hoo clasps. Assuming that the clasps represent female dress ornaments, were both clasps at Lermontovskaja worn at the same time? If so, where? Were they truly functional or primarily decorative? And, most importantly, are these Byzantine types imitated in provincial workshops or regional forms decorated in a Byzantine fashion?

We have established that mounts fastened by loops functioned as buckle plates and clasps of different types. This brief survey covers only a few prominent forms, whose variants may be refined in the future.¹²⁵ It remains to be considered how the Mound 1 clasps might have functioned, beginning with their possible association with a cuirass. The literature on armour is extensive and the ancient terminology far from clear, but as no attempt has been made to systematically examine the armour at Sutton Hoo, some of the aspects surveyed below may prove useful for future researchers. Research into both cuirasses and ring mail, the identifiable armour preserved in the grave, reveals intriguing connections which may expand our understanding of defensive armour in the period and the possible function of the shoulder clasps.

PART III

The muscle cuirass

As noted in the introduction, the potential association of the clasps with armour was introduced by Bruce-Mitford's publication of the Prima Porta statue of Augustus as a possible parallel (Pl. 18). This represents the emperor wearing the ceremonial or parade version of the Greek *thorakes* (body armour/protection),¹²⁶ defined in modern literature as the muscle cuirass (*Muskelpanzer*).¹²⁷ The majority of surviving examples can be dated to the 4th century BC¹²⁸ and consist of front and back sheets of copper-alloy secured by long rectangular hinges riveted along the shoulder and short hinges along the sides, allowing the armour to be swung open and lowered over the head.¹²⁹ Although at least one 4th-century cuirass from Magna Graecia preserves shoulder hinges with pins and chains,¹³⁰ it is clear that the Sutton Hoo clasps with their small loops on the reverse could never have been attached to metal.¹³¹ Nonetheless it is important for the following discussion to understand the basics of Greek and Roman muscle cuirasses and their fitments.

The Prima Porta sculpture (c. 19 BC–AD 14) depicts a Late Hellenistic Greek form of cuirass with short rounded straps at the front.¹³² These are atypical, as most Greek sculptural representations which reveal the armour free from a cloak show the cuirass plates secured by broad flat shoulder straps, cut-away at the outer edges and laced at the front to rings on the breastplate.¹³³ These were attached to the back sheet of the cuirass and then flipped forward over the shoulders and tightened down into place by means of tabs to rings on the breastplate of the armour.¹³⁴ This type of shoulder strap was in use throughout the Roman period and sculptural depictions of the reverse of cuirasses show the hinges located on the shoulder blades at the back rather than on the tops of the shoulders.¹³⁵ These cuirasses were worn over a leather or textile undergarment fashioned with protective strips at the shoulder and below the waist (*pteryges*). From the Diocletianic period onwards the shoulder straps, like the fabric sash worn around

the chest (*cinctorium*), are often carved as if decorated with large cabochon gemstones (Pl. 19). The colossus at Barletta (probably representing Valentinian I, 364–75), cited by Gamber and Bruce-Mitford in relation to the Sutton Hoo shoulder clasps, is one of the latest accurate depictions of a metal muscle cuirass, realistic down to the riveted hinges visible on the side, little changed from those preserved on earlier Greek cuirasses.¹³⁶

There was no specific term for muscle cuirass in Latin, and in earlier Roman literature the equivalent word to *thorakes* was *lorica*. The derivation of this term implied, like the later medieval term 'cuirass', leather as a key component.¹³⁷ No complete examples of metal muscle cuirasses survive from the Roman period,¹³⁸ and it has been argued that Roman muscle cuirasses were made of leather which has not survived.¹³⁹ Current opinion, however, holds that the classic type was made in copper-alloy or iron, perhaps with a leather lining.¹⁴⁰ Most probably the emperor's breastplate and high-status parade armour were made in expensive metal, while field cuirasses were composite affairs, made of leather and/or textile reinforced with metal. Parade breastplates made of separately-fashioned copper-alloy plates fastened by studs to a leather and/or textile support have been preserved; some of these appear to have been worn in association with scale armour.¹⁴¹ To the best of my knowledge none of the considerable surviving Roman period military leather has ever been identified as forming part of one of these or any other cuirass.¹⁴² Late Antique and Early Byzantine sources imply that high status defensive armour continued to be made of metal,¹⁴³ or at least fitted with sections of metal.¹⁴⁴

The Sutton Hoo shoulder clasps could never have been fastened to a classical metal muscle cuirass, nor could they have been associated with a leather and metal breastplate, unless we assume the latter was not buried in the grave. Before exploring some alternative proposals for chest protectors, it is important to review the implications of the coat of ring mail found in the grave.



Plate 18 Detail of cuirass worn by the Emperor Augustus (the Prima Porta statue), Vatican Museum



Plate 19 Post-Constantinian torso, Turin, Italy

Ring mail

The Mound 1 mail was preserved at the east end of the body space as a substantial folded mass at the lowest level of a group of wooden, copper-alloy and silver vessels. This complex was covered by a large silver dish with control stamps of Anastasius I (r. 491–518) (Pl. 20).¹⁴⁵ Although badly corroded, scientific examination determined that the mail was constructed of alternate rows of welded or forged rings and rings with copper-alloy rivets; these were approximately 8mm in diameter. It cannot be determined whether the mail was sleeved or how long it was, although the surviving volume and length (c. 60–62cm) suggests that it was at least tunic length or longer, depending upon whether it was folded in half or longitudinally.

The Sutton Hoo mail has received virtually no attention in the literature, yet it represents one of the more exceptional elements in the grave. Mail shirts or tunics are relatively well-represented in the archaeological record in Roman Iron Age Scandinavia and Britain,¹⁴⁶ but evidence for mail becomes very much scarcer in the Early Medieval period. Depositions of mail begin in the Frankish Rhineland in the first half of the 6th century and continue into the last decades of the 6th and first half of the 7th centuries, with the latest burials in Vendel Sweden. Many of the fragments of mail found in Austrasian Frankish, Alamannic, Lombardic and Vendel graves are associated as aventails with helmets, either of *spangenhelm* type¹⁴⁷ or, in Vendel Sweden, the crested variants which evolved from these and Late Roman parade helmets.¹⁴⁸ The role and function of the mail, however, is not always entirely certain in the graves at Vendel.¹⁴⁹ In the boat grave at Valsgärde 8, the mail was associated with lamellar armour, perhaps from limb defences and it has recently been argued that the mail at Castel Trosino Grave 90 represents sections of armour rather than an aventail.¹⁵⁰

Two mail coats have survived in relatively intact condition: one in an early 6th-century Frankish grave at Planig (Bad-Kreuznach, Rhineland-Pfalz, deposited first quarter of the 6th century) and another in the 'princely' Alamannic grave at Gammertingen (Baden-Württemberg, deposited c. 570).¹⁵¹ Both graves contained *spangenhelme* of Byzantine/Ostrogothic origin.¹⁵² The location of Planig grave 1 near the Trier-Mainz trade routes on the Middle Rhine has prompted speculation that the owner served in some official capacity, perhaps overseeing financial transactions on behalf of the Merovingian King Clovis I (482–511).¹⁵³ It is not clear how an older

spangenhelm came into the hands of the mounted warrior buried at Gammertingen,¹⁵⁴ but another was buried at Morken in the later 6th century, so these helmets were valuable, either because they were still functional or as status symbols. It is notable that the inclusion of the long hooded mailcoat and arrows amongst the military gear in the Gammertingen grave, together with a spear and sword, corresponds to the armament prescribed in the Byzantine military manual the *Strategikon* (I.2) for cavalymen of the higher ranks.¹⁵⁵

Given the very extensive archaeological finds from the 5th to 7th centuries in the West (now in the region of over 100,000 Germanic inhumation burials), it must be considered remarkable that so little mail was in use, or at any rate was consigned to the ground. It is possible that lamellar armour of eastern derivation was a more common form of body protection in the late 6th and early 7th century,¹⁵⁶ but in general the impression is that iron armour was rare and expensive, available only to high-ranking warriors, and perhaps passed down rather than buried.

The sparse archaeological evidence for metal armour in Europe dovetails with the literary evidence, suggesting that the famous observation by Agathias (*Histories*, II,5) that the Franks 'were ignorant of the use of breastplates or greaves', had validity in some contexts.¹⁵⁷ There is no mention of mail in the *Lex Salica* and it is intriguing that Gregory of Tours' (538–94) clearest reference to mail (*Liber Historiae Francorum*, VII.38, '*circulis luricae*') refers to armour worn by Gundovald, a pretender to the Merovingian throne who had served in Constantinople and operated with support from the Byzantine Emperor Maurice.¹⁵⁸ Gregory's writings in fact encapsulate the transformation in usage of the Latin term *lorica*, which increasingly came to mean only metal armour or mail. The description of *lorica* in Isidore of Seville's *Etymologies* sums up the situation: 'the cuirass (*lorica*) is so-called because it lacks thongs for it is made only of iron rings'.¹⁵⁹ Isidore (Bishop of Seville, d. 636), seen as one of the great intellectuals of his age, of course, wrote from an educated perspective in Visigothic Spain, whose Mediterranean periphery then formed part of the Byzantine Empire.

The Germanic term *bruina* (the origin of the later medieval term *byrnie*, a mail hauberk) appears in the *Lex Ribuaria*, written c. the 630s but preserved only in later emended manuscripts; this law code of the pagan and war-like Rhineland Franks differs from that of the Salian Franks and offers some proof of their distinct identity. Here (at 36.11) a good 'mail shirt' (*bruina bona*) was worth 12 *solidi*: twice the value of an embellished helmet (*helmo conderecto*) or good greaves (*bagnbergas bona*), three times that of a sword without a scabbard (*spata absque scolio*) and six times that of a shield with spear (*scuto cum lantia*). In Anglo-Saxon England in the late 7th century the law code of Ine of Wessex (*Ine* 54.1) also uses the term *byrnan* to describe an armour whose value is equivalent to the *wergeld* for a man.¹⁶⁰

The status of a coat of mail, therefore, is not in question, but we might suggest that the presence or absence of mail in grave contexts may also be indicative of participation in specific modes of warfare. In this respect mail armour, like a *spangenhelm*, may be seen as evidence of direct or indirect contact with Byzantium, where mail was the primary defensive armour of the elite heavy cavalry of the Byzantines, as it was

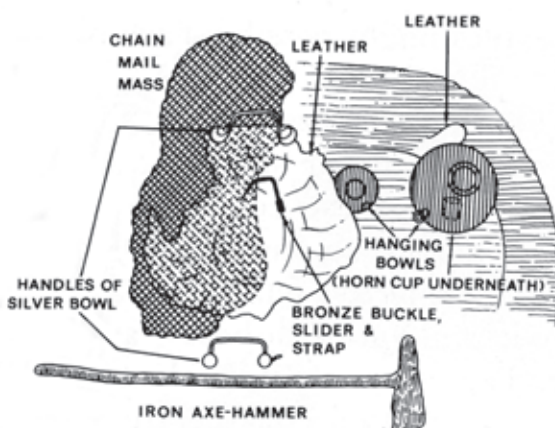


Plate 20 Sketch of the Mound 1 mail *in situ* in the grave



Plate 21 *Notitia Dignitatum*, 16th-century ms. after first half of 5th century original

for their Sasanian Persian opponents.¹⁶¹ Imperial arms factories were undoubtedly capable of producing mail¹⁶² and images of what may be lined coats of mail are shown in illustrated manuscripts of the late 4th-century *Notitia Dignitatum* lists together with other arms and armour (including breastplates of various styles) under the insignia of the *Magister Officiorum* (Pl. 21). Eastern Roman arms factories continued to function at least until the end of the 6th century, but, just as no mail has been preserved in Sasanian Persia, there are no certain examples of Late Antique or Early Byzantine period mail, unless we consider the fragments in the 4th-century kurgan burial at Kišpek on the Terek (Kabardino-Balkaria) in the north-central Caucasus or, even further east in the 5th-century military leader's grave found at Federovka (Samara) on the Volga, as evidence of Eastern Roman manufacture.¹⁶³ Both mail and lamellar elements were found in a mid-6th-century Apsilian fortress built by the Byzantines at Cebelum (Tsilbilium) in Abkhazia.¹⁶⁴ An intact and perfectly preserved mail shirt of the early Khazar period (7th–8th or 9th century) has also been found at Kazazovo in Adygea.¹⁶⁵ Weaponry such as axes and swords found on other Abkhazian sites have been seen as reflecting the diffusion of Byzantine types via large imperial forts such as that at Sebastopol.¹⁶⁶

It is, at present, impossible to determine the age of the mail in the Sutton Hoo burial; if well-treated, it could have been made anytime in the later 5th or 6th century and thus be as old as the Anastasius dish it was associated with in the burial. It is likewise impossible to determine on current evidence where mail was made in either the East or West in the Early Medieval period, although similarities between some of the surviving mail suggests a certain consistency in workshop traditions.¹⁶⁷ It is equally difficult to propose exactly what this mail may have looked like. One popular visual image is that of the possible mail worn by foot-soldiers on the decorative plaques on the Vendel Grave 14 and Valsgårde Grave 7 helmets; these are



Plate 22 Drawings of helmet decoration: Vendel Grave XIV (top); Valsgårde 7 (bottom), both Uppland, Sweden

depicted as short-sleeved garments reaching to the knee covered with ring and dot decoration (Pl. 22).¹⁶⁸ In this case the Sutton Hoo mail may have been woven in a single unit as a 'pullover' with a slit front opening or neck flap.¹⁶⁹ As we have seen above (Pl. 21), the *Notitia* also depicts long coats with sleeves to the elbow and split up the lower third, presumably for riding; these are similar to the heavy coats of mail depicted being carried on poles and worn by the riders in the 11th-century Bayeux 'tapestry'.¹⁷⁰ This length (but not the sleeves) would be closer to the Gammertingen mail which, with its hood, was 98.5cm long.

At Sutton Hoo the mail was at the bottom of a large mineralised and corroded pad with the silver vessels. It remains challenging to interpret the relationship between the textiles, leather and mail in the grave, but it is likely that some of these were originally directly associated with the mail. The textiles directly on the mail included narrow overlapping tapes in a tabby weave, most probably of linen, as well as coarse and fine diamond twills in wool.¹⁷¹ The fragments of mail from graveaves at Vendel Grave XI also had fragments of cloth rusted on both sides, suggesting either lining with an outer covering or a sandwich of mail between textiles.¹⁷² At Benty Grange in Derbyshire, Bateman, the mid-19th-century investigator of the tumulus found, in addition to the famous boar-crested helmet in horn and iron, iron 'chain work' consisting of lozenge-shaped and square iron rods linked by rings; these preserved 'the impression of cloth over a considerable part of the surface'. The iron 'chain work' was found near the helmet but its appearance and large mass led him to conclude that it originally constituted a 'kind of quilted cuirass, by being sewn up within, or upon a doublet of strong cloth'.¹⁷³ These

discoveries are not surprising as metal armour from the Roman to Medieval periods exhibits a complex interdependence between textiles, leather and metal. Some metal protectors were simply lined to prevent chafing,¹⁷⁴ while others had thicker layers of textiles such as linen and felt as defensive padding.¹⁷⁵

The description of metal armour in the *Strategikon*, the handbook of military tactics ascribed to the Emperor Maurice and probably written between 575 and 628 (i.e. contemporary with Sutton Hoo), throws some further light on these European finds of armour. The *Strategikon* uses the new term *zaba* (ζαβα; *Strategikon* I, 2; VII,ii, 15; X,1; XI,2; XII B4, 16, 20 and 23) for the protective armour worn by commanders and cavalrymen. The *zaba* was a complete armour long enough to reach to the ankles (presumably when riding); it could be worn with a separate hood and could be pulled up with a strap and rings on the coat. The tunic below the mail ranged in quality from linen to goat's hair or rough wool and over the *zaba* an extra large cloak or hooded mantle of felt was to be worn to protect it from the elements and enemy eyes (*Strategikon* I.2; VII.15).

Zaba is generally translated as 'mail' or 'cottes de mailles' but the more inclusive German term 'Panzer' may come closer to the reality.¹⁷⁶ One 7th-century source gives the weight of a *zaba* as 50 *litrai*, that is, roughly, 16kg.¹⁷⁷ This is twice the weight of the almost complete Iron Age shirt from Vimose,¹⁷⁸ suggesting some *zaba* were not only long but also padded and perhaps incorporated some solid iron as well. The term *zaba* is probably of Turkish or Persian origin¹⁷⁹ and it has been suggested that such armour may have been the forerunners of the Muslim *kazakan* (Ar. *kazāghand*, Persian *qazāghand*) mentioned in later Byzantine sources – mail stitched to cloth and covered with a good-quality fabric.¹⁸⁰ It would not be surprising to discover that mail in Germanic graves shared some of these features and was backed by and/or covered with textile.

The *Strategikon* passage (VII.15) concerning concealment of the bright *zaba* mentions the need to cover not only the breast, suggesting this may have been further reinforced with reflective iron, but also the *skaplidas* (σκαπλίδας) of the *zaba*.¹⁸¹ This non-Greek term, which may derive from the Latin *scapulae* (shoulder blades), refers to some sort of metal shoulder pieces.¹⁸² The possibility that these shoulder mounts were both functional and decorative is supported by another passage (*Stratigikon* I.2) which recommends wearing small pennons at the shoulders in order to impress the enemy.

Thorakos and lōrikion: chest protectors

Literary references to *zaba* place the term in relation to another type of armour. A law in the *Novellae Justiniani* (85,4), for example, prohibits the private fabrication of either *zabai* or *lorikia* and a Visigothic law issued in the reign of Flavius Wamba (r. 672–80) (*Lex Visigothorum* IX,2,9,13) requires either *zaba* or *lorika* (*zabis vel lorikis*) to be included amongst the essential arms and armour provided by landowners to their men when they joined (or were conscripted) into the king's army. Likewise the *Strategikon* (XI.1), in describing Persian armour, distinguishes these two types: *lōrikion* (λωρικιον) and *zaba* (ζαβα). In later Greek sources *lōrikion*, like the Latin term *lorica*, came to refer exclusively to mail,¹⁸³ but in the instances cited above it is probably used in the Roman sense to refer to a cuirass.¹⁸⁴ As early as the 3rd century, Sasanian rock-cut reliefs at Firuzabad depict chest protectors worn over mail (**Pl. 23**)¹⁸⁵ and Bivar, writing about defensive armour on the eastern frontier in the Late Roman and Parthian/Sasanian periods, made the interesting point that mail is the only defensive protection that can be worn in combination with other armour.¹⁸⁶

Early Byzantine authors writing in Greek continue to use the term *thorakos* (θορακος) to mean a breastplate or chest protection.¹⁸⁷ In the later 6th century when Gregory of Tours (*LHF* V.48) described the over-armed Merovingian noble, Count Leudast, '*cum toracibus atque lorisis*', although it is clear that he is exaggerating, it seems likely that he meant an actual combination of protective body armour, in this case a cuirass over mail.¹⁸⁸ These passages suggest that, as depicted in the *Notitia Dignitatum* (**Pl. 21**), two types of protective armour were in use in the Early Byzantine period which could, in some cases, be combined: one to cover the torso, upper arms and thighs and the other to protect the chest. An examination of the latter returns us to the possible function of the Sutton Hoo shoulder clasps.

Assuming, on the basis of the above evidence, that torso protectors of some form were in use in this period, of what materials were they made and what form did they take? The following discussion considers some possible organic types and



Plate 23 Detail and drawing of rock relief depicting Ardashir in battle, Firūzābād, Fars, Iran

combinations in relation to the Sutton Hoo shoulder clasps. One key consideration which emerges is the question of whether whatever they were attached to provided any real protective function or was largely decorative.

It is useful to begin with leather, which has figured large in the popular imagination as the material onto which the shoulder clasps were mounted. It is not totally impossible that the Sutton Hoo shoulder clasps were fitted to a leather chest protector. Desiccated archaeological leather (primarily knife sheaths) preserved in Anglo-Saxon contexts averages 1.5mm in thickness;¹⁸⁹ when new this could just about be accommodated by the clasp loops. A stiffened leather cuirass sophisticated enough to match the shoulder clasps would have had to have been very deeply cut-away at the shoulders to correspond to the 5.4cm wide clasps. An idea of what this would have looked like is suggested by an experimental leather breastplate of late 18th-century date in the Royal Armoury.¹⁹⁰ Although the sides of such a cuirass could conceivably have been laced together, one would expect it to have been fitted with buckled straps for closure along the sides. The narrow width of the clasps probably would have rendered them ineffective as fastenings for a thin and supple leather shirt or jerkin,¹⁹¹ although a heavier padded leather 'vest' could be envisioned.¹⁹² Another possibility would be a cuirass of hardened leather lamellae or large plates similar to the depictions of Chinese armour, which hung from leather or textile straps fastened by means of buckles.¹⁹³

A leather cuirass would have had some considerable protective advantage if worn over the mail, but if worn alone, whether tanned, oiled, waxed or boiled, would have had few defensive properties.¹⁹⁴ Modern scientific experiments testing the efficacy of different types of armour against a variety of weapons have confirmed Robinson's insistence about the inefficiency of leather, revealing plain oil-treated leather (buff leather) and *cuir bouilli* to be less effective than other organics such as horn and linen.¹⁹⁵ The *cuir bouilli* tested was 5mm in thickness, i.e. much more robust than anything the Sutton Hoo clasps could have been directly fastened against. Therefore, if a leather chest covering is surmised to have existed in Mound 1, worn alone it is likely to have been primarily for display rather than field effectiveness.

Literary sources describe another type of classical armour (almost wholly ephemeral from an archaeological point of view) fabricated of textile alone, specifically linen. *Thorakes lineoi* is mentioned in early Greek sources,¹⁹⁶ and later Roman¹⁹⁷ and even Middle Byzantine sources such as the *Sylloge Tacticorum* (an anonymous late 10th-century military manual) continue to describe linen breastplates,¹⁹⁸ but these references often seem to be anachronistic or archaising so it is difficult to know whether such things actually existed in the Early Byzantine period. Breast protectors composed of wide bands around the lower chest and waist and with wide bands over the shoulder are depicted on mosaics and wall paintings from the 6th to 8th centuries.¹⁹⁹ Similar chest protectors appear with regularity in Middle Byzantine manuscripts, often in Biblical contexts.²⁰⁰ While some of these undoubtedly were conceived of as textile,²⁰¹ we cannot determine if they represent current functional armour or archaising fantasy. In any case these would hardly have required clasps at the shoulders.

Somewhat closer to reality might be the images in the



Plate 24 Chludov psalter, folio 58r, State Historical Museum, Moscow

9th-century Chludov Psalter, illuminated in Constantinople, which depict soldiers wearing plain breast protectors over long-sleeved garments (Pl. 24).²⁰² Although at first glance these too appear archaising, the soldiers wear medieval helmets with mail aventails and the rows of protective scales below resemble the later *kremasmata* or padded and quilted skirt of Middle Byzantine armour.²⁰³ Most importantly, the plain torso protectors are not modeled like a muscle cuirass, but are more loosely cut and shown as fastened at the shoulders.

Another indirect glimpse of the evolution of chest protectors may be offered by the depiction of the *aegis* on Athena weights of the Late Antique and Early Byzantine periods.²⁰⁴ This is shown as a sleeveless garment in two sections, joined at the shoulders; the reverse and left side of the front are often depicted as scaled or lammellar armour while the right side of the front is draped textile, mounted with a *gorgoneion*. On an example in the collection of the British Museum (PE 1980,6-2.12) the brooches which originally fastened the *aegis* have devolved over time into simple flat clasps (Pl. 25). Variants of the imperial *aegis* with a *gorgoneion* which appear on Roman coinage from the 1st to 4th centuries are sometimes shown as fastened by large brooches at the shoulders and on others by simple straps; on 2nd- and 3rd-century coinage the *aegis* is shown as worn over scale or mail armour.²⁰⁵ No conclusions can be drawn regarding the structure of the *aegis* fittings from the coin representations, but it is interesting to note that the 3rd-century imperial-style 'brooch' from Grave 1 at Ostrovany, Slovakia, was not fastened by means of a pin, but was held into place by means of multiple flat loops on the reverse (Pl. 26).²⁰⁶ This high-status jewelled ornament was permanently fixed to some sort of garment, but perhaps not necessarily to a cloak conventionally pinned at one shoulder.



Plate 25 Front and reverse of Athena bust weight (PE 1980,6-Z.12); H:12.4cm

Returning to the problem of the Sutton Hoo Mound 1 'cuirass', a hypothetical organic cuirass incorporating layers of linen would have considerable protective advantages as linen is the strongest of all vegetal fibres (two to three times the strength of cotton). It could have been used as multiple soft layers, stitched and quilted together, or hardened by treatment with linseed oil and moulded as bands. The experiments cited above testing the ability of different types of armour to withstand attack found that layered quilted linen was as effective as mail in warding off blows from edged weapons and from arrows,²⁰⁷ so there can be little question of its efficacy as protective armour.

Linen was one of the main textile types found in Mound 1²⁰⁸ and as linen has been found in Anglo-Saxon contexts across England²⁰⁹ it would only be the concept of such a cuirass and not necessarily the fabric itself which would have had to have

been imported. If the cuirass was not required to be protective on its own, wool, the other major material of Anglo-Saxon textiles, or even fur, may be deemed to have been more appropriate for a northern climate.²¹⁰ Either of these could also have incorporated other organics, such as leather lamellae or horn scales. If this hypothetical garment carried any weight, through the addition of scales or padded layers to enhance its defensive function, it may have benefited from being fitted onto the body in two sections which could be opened at shoulder level. One or both sides could have been tightened with straps.

A strong point in favour of some variation of a textile cuirass at Sutton Hoo is the fact that the torquing and lateral movement of the clasps as preserved in the grave can be easily accounted for by either linen or heavier wool.²¹¹ All evidence of organic armour would have disappeared completely in the acid conditions of the grave. The choice between a protective or non-protective design cannot be resolved, but it is interesting to note that two similar alternatives are recorded in Middle Byzantine texts: the *epilōrikon* (ἐπιλωρικόν), a sleeveless textile garment worn over the mail/scale shirt and the *klibanion* (κλιβανιον), a sleeveless protector fashioned of lamellar splints on a leather and/or textile base.²¹²

Either of such coverings would have the potential of being worn separately or over the mailcoat, as the occasion demanded. The form could have been loose or shaped to the body with straps at the shoulders like a 14th-century gambeson, now in Munich, which was fastened with hinged metal fittings on the shoulder straps.²¹³ It is clear that the shoulder clasps were designed not only to open and close, but to move in a flexible manner, so the possibility that they were mounted on broad shoulder straps is attractive. In fact, as the shoulder clasps were removable, the defensive capabilities of such a 'cuirass' or vest could have been adjusted as required.²¹⁴

This section has again presented a series of hypotheses, but also a few conclusions. It is quite clear that the shoulder clasps were not attached to a metal muscle cuirass, and, on balance,



Plate 26 Front and reverse of 'imperial-style' brooch, Ostrovany Grave 1, Slovakia, Kunsthistorisches Museum, Vienna, Antikensammlung, Inv. no. VII B 306; H: (of brooch alone) 6.5cm

not to a *cuir-bouilli* cuirass in this shape either. The primary armour in the grave was the mail which reflects the high status of its owner. Whatever the shoulder clasps were attached to was likely to have been a secondary and, following the literary evidence, perhaps a complementary armour to the mail. This author prefers to conceive of it as functional, like all of the regalia in the grave, which would tend to favour linen, perhaps with additional components. The evidence must remain wholly inconclusive, yet it is to be hoped that this examination has brought us closer to understanding the reality of contemporary armour. We need only consider the terms used in *Beowulf* to realise that body armour came in many forms in Early Medieval Europe as well as the Byzantine East. Here, in addition to the famous *byrnie*s, we find words for protective battle wear such as: *licsyrce* (body shirt) and *beadobrægl broden* (woven battle garment).²¹⁵ These may find some new resonance following this survey.

Conclusions

Despite the absence of clear parallels, the Sutton Hoo shoulder clasps could not have been produced in a vacuum and must mirror developments which cannot be easily traced in the archaeological record. This paper has attempted to establish some parameters by which the mysterious clasps can be assessed.

First, the paper has proposed a date range for the clasps. This is in itself a very vexed problem. The proposed dates for Sutton Hoo Mound 1 are based on coin dates, which have varied with each scholarly generation, and attributions to historical persons that can never be confirmed; these in turn have perhaps unduly impacted on continental chronologies. It is well known that Anglo-Saxon England lacks at present any statistical basis for a regional chronology comparable to the very sophisticated systems which have been developed for continental and Scandinavian grave goods, primarily on the basis of correspondence analysis. With unparalleled objects such as the shoulder clasps this would be meaningless anyway so the discussion above has attempted to associate the decoration on the clasps with sword fittings and belt mounts, object types which have featured in chronological and seriation analyses on the Continent. This was done on a stylistic basis, which is inevitably subjective and open to objection, but which does open the door to rational discussion.

An analysis of the *cloisonné* ornament suggests that the clasps can be aligned with continental weapon and belt mount typologies whose period of production and deposition is currently held to be from 560/70 to 600/610. We lack enough information to suggest where in this 40- or 50-year range the clasps may actually have been made, but one factor to take into consideration is the fact that, for whatever reasons, there seems to have been a significant interruption to the garnet supply to the West in the later 6th century;²¹⁶ this may have been one underlying reason for the increasing diminution of garnet inlays visible in the new style composed with 'mushroom' and 'elbow' cells. The numbers of stones of (relatively large) size and the carpet of matched stepped rhomboids on the shoulder clasps argue for production in an environment relatively unaffected by these changes. Of course, if we believe we are dealing with a 'royal' workshop we might insist that that these difficulties could be overcome at any

stage, but on a practical basis it is likely that the clasps were produced when scarcity was not a factor. The confident display of a rhomboid carpet, like the non-zoomorphic rope interlace on the sword belt mounts, suggests these were made at a period when both conservative traditions derived from mosaic patterns and the intricate geometric 'mushroom' cellwork were thriving.

Although it could be proposed that the *tour-de-force* of freely cut shapes used to create the boars and interlace reflects some further stylistic development from geometric cellwork, in reality this meticulously rendered naturalism, like early Style II, is also characteristic of the last decades of the 6th century. The shoulder clasps share this and other features with the purse lid from Mound 1 which, on various grounds, probably also belongs to this period.²¹⁷

It must be emphasised, however, that the above arguments reveal nothing about the *deposition* date of the burial. It is clear that *cloisonné* objects made in the last decades of the 6th and early 7th century were highly valued throughout the first half of the 7th century as they are often found in later deposits or associations.²¹⁸

The preceding analysis of reverse attachment loops also fixes the clasps in a broader cultural continuum when 'eastern' (steppe nomadic and Persian) influences were strongly felt in Byzantine goldworking. Such loops appear to be evidence of the spread of Byzantine methods amongst high-status jewellers in the West; whether they may also be an indication that the goldsmith who made the clasps had some specific training in a 'Byzantine' tradition cannot be determined. The astonishing quality of the garnet cutting and fact that the goldsmith also had knowledge of the trick of using gold 'lidded cells' to create a design might be offered as evidence in favour of the latter possibility.

Finally, it is now important to revise earlier concepts of what kind of 'cuirass' these clasps fastened and mentally erase the convenient visual image of an imperial muscle cuirass in metal or hardened leather. While we cannot reject entirely the possibility of a softer leather or fur garment, it is interesting to note a speech given by a Roman tribune to troops fighting the Avars in the 580s in which a leather jerkin is dismissed as something worn only by a rustic or unskilled labourer (Theophylact Simocatta, *History*, II.14.2). Taking into consideration the materials and workmanship of the clasps, whatever they fastened must surely have matched them in quality and status. They most probably secured a chest covering incorporating first-rate textile which had either a protective or decorative function or both.

These are the relatively secure conclusions we can draw. Conclusions at the next level are more hypothetical but permit some further speculation regarding the historical circumstances in which the clasps might have been conceived and produced.

The possibility that both the form of the clasps and their primary design components (boars, geometric panels, interlace borders) might reflect an awareness of Late Roman belt sets places the clasps in a classicising and, perhaps, a perceived official context. If at first consideration the possibility of this derivation may appear far-fetched, we should not forget the remarkable imitation belt mounts on the Irish shrine from Moylough which copied a related variant of a Late Roman

buckle type (or its unpreserved offspring), still available in the 8th century.²¹⁹ A military belt found in Austria at Iuenna/Globasnitz, mounted with *cloisonné* plaques and with a silver-inlaid iron buckle, attests that high-status Late Roman belts were being re-interpreted in the Ostrogothic period (c. 493–536).²²⁰ In some respects a related situation exists with regard to the crested helmets found at Sutton Hoo and in Vendel Scandinavia: these descend from a particular type of Late Roman officer's helmet, yet the stages in this evolution from the 4th to the 6th century are only slowly being pieced together in the archaeological record.²²¹ With the helmet series, of course, there is not the additional problem of accounting for an alteration in function as well.

Although no object typology can yet be established for the clasps, it is possible that hinged clasps with empty *cloisonné* cellwork found in the northern Caucasus in burials of peoples politically aligned with the Byzantine Empire might point towards developments within the Empire itself. Evans kindly published my suggestion of this connection in 1991,²²² but no 'missing links' have come to light since that time to clarify the position of these vis-à-vis Sutton Hoo. Future excavations may indicate more precisely the function and significance of these luxury dress items, often the only solid gold objects in these graves. The increasing alignment of European and Crimean/Transcaucasian artefact types is an ongoing process which may eventually lead to an understanding of the role played by 'Byzantium' in the diffusion of these apparently 'international' styles. Whatever their inspiration, the shoulder clasps and their 'cuirass' seem to represent an evolutionary step towards later Medieval surcoats and gambesons, designed to be worn over mail.

The presence of mail in the grave raises other important considerations about the grave assemblage. How was the mail acquired? If the buried man or one of his ancestors fought as a mail-clad warrior, where did he fight? Skirmishes and aggressive advances are recorded in many areas but the primary theatre of war for northern Germanic tribes in the 6th century was Italy, first in the Byzantine/Ostrogothic conflict between 534 and 554 and later in the often successful campaigns of the Rhineland Franks and their Burgundian allies in northern Italy between 539 and 562. Afterwards, in the 570s and 580s, the eastern Frankish successor kingdom of Austrasia, sponsored by the Byzantines, competed with the Lombards for control of this key political and economic territory. The highly militarised and largely pagan societies of the Rhineland Franks and the Lombardic confederacy thus provided men of two or more generations with the opportunity to interact with other Germanic tribes as well as Byzantine troops stationed in Italy and points further east. As was common throughout the period, ethnicity had no bearing upon military and political allegiance. It is well known, for example, that Narses recruited Lombard soldiers to fight on the Roman side in 551 in Italy (Procopius, *De Bello Gothico* IV.16.5.17) and that the Emperor Maurice himself raised troops from Italy after agreeing a three year truce with the Lombards in 586.²²³ In this decentralised environment the situation with regard to arms and armour and their decorative fitments must have been fluid, with innovations evolving within elite warrior groups responding to differing battle situations, in the same way that Maurice adapted Byzantine armour to the contingencies of

fighting the Avars and Persians. Similar arguments might be applied with respect to the evolution of systems of formalised ranking, rewards and display insignia.

There would seem to be little question that the arms and armour in Mound 1 to some degree reflect this milieu. Parallels between the type of shield found in Mound 1 with not only Vendel Swedish, but also Bajuwaren and Lombardic shields, were set out by Bruce-Mitford.²²⁴ The grave goods recently excavated in another high-status grave, at Prittlewell in Essex, offer further evidence of a high-status man in Anglo-Saxon England who may have been directly associated in some fashion with the Lombardic confederacy.²²⁵

The innovation of jewelled shoulder clasps of the sort preserved at Sutton Hoo can best be imagined to have taken place in a military context which preserved some continuity with a classical past. Military regalia, if that is what the clasps indeed represent, is not often thought of in the same light as courtly Byzantine jewellery, yet the production of high-status armour and insignia was fully within the imperial remit in the Late Antique period.²²⁶ Representational evidence and a few surviving objects offer a reasonably clear idea of what constituted ceremonial regalia worn by the emperor, empress and their imperial retinue.²²⁷ But of the actual armour for defense and display worn by high-ranking members of the palatine regiments or other elite field units such as the *bucellarii*, *foederati* and *optimates* in the 6th century,²²⁸ virtually nothing is known, although the production of the majority of arms, if not necessarily armour, remained a tightly-controlled state monopoly throughout the 6th century.²²⁹ The *Strategikon* (I.2.7; I.2.3; I.2.20–21) is clear about the superior arms and equipment used by the *bucellarii*, who, in addition to their higher pay, better armament and ceremonial duties, still received, in the time-honoured Roman manner, *dona* and military awards in gold.²³⁰ It is of considerable interest that one early set of silver *phalarae*,²³¹ which were *dona militaria* gifted from the emperor to centurions in the imperial Roman period,²³² were manufactured with reverse attachment loops which fastened them to a harness designed to be worn over a scaled cuirass.

If the shoulder clasps demonstrate familiarity with both Late Roman military belt mounts from the western Empire and hinged garment fittings preserved on the eastern fringes of Byzantium, the possibility that such ornaments were initially conceived in Lombardic/Byzantine Italy must be strong. If we are correct in locating the conception of a chest protector closed with jewelled clasps in this region, it is unlikely that such armour originally conveyed any sense of *imitatio imperii* in this context, where the formal trappings of the *imperium* – the diadem, purple robes and single brooch – were well known. Seen *in toto* the highly decorated arms and armour, like the more prosaic mail, axe-hammer and spears buried in Sutton Hoo Mound 1, characterise the functional reality of an elite warrior's life in the Germanic-Byzantine military world. The image projected by the Mound 1 assemblage was that of a top military commander, perhaps identifiable by his shoulder clasps as a high-ranking member of a particular tribal or military order whose emblem was the crossed boars. How these trappings were seen in a far corner of Europe, of course, might have been another matter.

One final consideration might be whether it is significant

that, unlike the shirts at Planig and Gammertingen which were placed directly above the coffin in the first case and to the immediate right side in the second, the Mound 1 mail was folded and placed at the end. Perhaps the particular association of the mail with the axe-hammer and Byzantine silver encapsulates one aspect of this Anglo-Saxon lord's life, just as the garment with shoulder clasps and single long spear set specifically alongside him may reveal another, with allusions to hunting, mounted warfare and processional triumph. Such physical arrangements might also have indicated temporal spheres, defined by possessions acquired in the past or inherited from his ancestors. If the arms and armour represent a warrior's operational gear, which surely they must, then we might also need to consider whether direct Byzantine contact, as opposed to gifting through Merovingian intermediaries, might explain how Byzantine silver found its way into the hands of this Anglo-Saxon elite family.

Such contemplations must remain speculative. To our distant modern eyes, however, it seems that one clear message conveyed by the Mound 1 burial to those who conceived and witnessed it is summarised by the words ascribed by Ennodius (*Panegyricus* VIII.5) to Theodoric the Great as he donned his armour for battle: 'Let them at least say, "How splendid he looks in death," if they have not the chance to admire me fighting'.²³³

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Notes

- 1 R.L.S. Bruce-Mitford, *The Sutton Hoo Ship-Burial*, Vol. 1, *Excavations, Background, The Ship, Dating and Inventory*, The Trustees of the British Museum, London, 1975, 578–88, 673–716. The purse in the grave contained a group of 37 Merovingian gold *tremisses*, 3 blank flans of approximately the same weight and 2 ingots equal to 4 *tremisses* in weight, the total equivalent to just over 16 *solidi*. The date and the nature of the coin assemblage are still debated. Core literature includes J.P.C. Kent in *ibid.*, 588–647 (proposing the latest coin c. 625); A.M. Stahl and W.A. Oddy, 'The Date of the Sutton Hoo Coins', in R. Farrell and C. Neuman de Vegvar (eds), *Sutton Hoo: Fifty Years After*, American Early Medieval Studies 2, Kalamazoo, 1992, 129–47 (concluding all the coins could have been struck before 613); and most recently G. Williams, 'The circulation and function of coinage in conversion-period England', in B. Cook and G. Williams (eds), *Coinage and History in the North Sea World c. 500–1250, Essays in honour of Marion Archibald*, Leiden, 2006, 145–92, at 177–81 and 192, who demonstrates that the absolute *terminus post quem* of three of the coins is 595, which allows a deposition range between 595 and 640. He supports the idea of a random group assembled within 'an extensive but uncontrolled circulating currency' and warns in general against the use of coins for dating purposes in this period. Recently Marzinzik (S. Marzinzik, *The Sutton Hoo Helmet*, London, 2007, 55) proposed the dead man may have been Raegenhere, Raedwald's son killed in battle in 616.

- 2 Bruce-Mitford (n. 1), *passim* and 518–21; R.L.S. Bruce-Mitford, *The Sutton Hoo Ship-Burial*, Vol. 2, *Arms, Armour and Regalia*, The Trustees of the British Museum, London, 1978, 523–35.
- 3 Bruce-Mitford (n. 2), 533–4, following O. Gamber, 'The Sutton Hoo military equipment – an attempted reconstruction', *Journal of the Arms and Armour Society* 5 (1966), 265–87, at 269, pls L, LIV, LVI, LVII.
- 4 Bruce-Mitford (n. 2), 534: '...an equivalent relationship between a feature of a *Bretwalda's* ceremonial dress and Roman Imperial body armour is not unlikely'.
- 5 L. Webster, 'The royal image: the Sutton Hoo Mound 1 ship burial', in L. Webster and M. Brown (eds), *The Transformation of the Roman World, AD 400–900*, London, 1997, 222–3, cat. no. 53c.
- 6 W. Filmer-Sankey, 'The Roman Emperor in the Sutton Hoo Ship Burial', *Journal of the British Archaeological Association* 149 (1996), 1–9, at 4: 'The best way to account for the obvious differences in all but basic form between the Sutton Hoo clasps and the Roman examples is to argue that they were copied from a representation of a Roman Emperor in armour, such as might have appeared on the cameo from mound three [*sic*]' and at 8, suggesting that Raedwald presented himself as a 'fancy-dress emperor'.
- 7 Bruce-Mitford (n. 2), 438, fig. 316.
- 8 Bruce-Mitford (n. 1), 196, 489–93, 741. Subsequent phosphate sampling strongly suggested that there was a body in the burial which was not preserved in the acidic sandy soils, *ibid.*, 493–510, 529–43.
- 9 Bruce-Mitford (n. 1), 740; *idem*, (n. 2), 437 (armlets), 532–4.
- 10 Gamber (n. 3), 269; Bruce-Mitford (n. 1), 518, fig. 385.
- 11 Bruce-Mitford (n. 1), 196, figs 126–7; 518, fig. 385; *idem*, (n. 2), 274, fig. 207. The first field sketch by Stuart Piggott and photographs taken shortly thereafter both show this. On the sequence of photographs, however, it is clear from the position of the chains on the clasps that they have been picked up, perhaps to be cleaned of dirt, and then set back down into place (compare figs 126–7 and 385). The relative position of the pin heads has not changed.
- 12 *Ibid.* (n. 1), 520–21, 543. Key elements of the sword belt, for example, were found upside down, suggesting the belt had been twisted. This led to Phillips and Crawford suggesting that the belt had been hung from the roof of the burial chamber. Bruce-Mitford ultimately agreed with this interpretation but also considered whether the body might have been seated or propped up and then fallen forwards with the result that some of the belt mounts and purse lid fell upside down. The roof scenario is highly unlikely but it is possible that the grave contained other furniture on which the armour may have been placed. M. Carver (*Sutton Hoo: Burial Ground of Kings?*, London, 1998, 125–6, figs 75, 78–9, 81) envisioned a coffin, but the evidence does not wholly support this (K. East, 'The Sutton-Hoo Ship Burial: A Case Against the Coffin', *Anglo-Saxon Studies in Archaeology and History* 3 (1984), 77–82. Collapse of wooden furnishings, together with animal activity and shifting weights of the sandy filling within the grave could account for much of the apparent disturbance.
- 13 *Ibid.* (n. 1), 519, 521.
- 14 *Ibid.* (n. 2), 534, immediately prior to his comparison with the clasps shown on the Prima Porta cuirass, he states that the clasps: 'must have been used to join the front and back of a two-piece garment or surcoat, assembled on the body'.
- 15 *Ibid.* (n. 2), 534. Bruce-Mitford may also have been influenced by Gamber's grave reconstruction showing a muscle cuirass opened out in the grave. Gamber (n. 3), 269 stated confidently that: 'the cuirass was undoubtedly of moulded leather'. Carver's (n. 12, fig. 78) reconstruction of the furnished chamber omits the problematic shoulder clasps altogether.
- 16 R. Jessup, *Anglo-Saxon Jewellery*, Shire Archaeology, Princes Risborough, 1974, 90; E.A. Cameron, *Sheaths and Scabbards in England AD 400–1100*, BAR British Series 301, Oxford, 2000, 26; P. Walton-Rogers, *Cloth and Clothing in Early Anglo-Saxon England, AD 450–700*, CBA Research Report 145, 2007, 210.
- 17 U. Roth, 'Studien zur Ornamentik frühchristlicher Handschriften des insularen Bereiches', *BerichtRGK* 60 (1979), 7–230, at 157–64; B. Arrhenius, *Merovingian Garnet Jewellery*, Stockholm, 1985, 58–75, figs 71–3. In many cases only the central stepped rhomboid is a complete form, inlaid not in garnet but in glass or organic material of contrasting colour to create a focal cross.
- 18 Arrhenius (n. 17) suggested that some of these stones were traded pre-cut; whatever their source, there can be no doubt that the size

- of available plates decreased steadily over the course of the 6th century.
- 19 N. Adams, 'The Development of Early Garnet Inlaid Ornaments', in Cs. Bálint (ed.), *Kontakte zwischen Iran, Byzanz und der Steppe in 6.–7. Jahrhundert*, Varia Archaeologica Hungarica IX, Budapest–Naples–Rome, 2000, 13–70, at 35–8, pl. VIII.3–5.
 - 20 Arrhenius (n. 17), 84–5, 101–2, 203, figs 106, 116. She made her argument on the basis of the gypsum pastes used to mount the stones, but pastes may reveal more about workshop traditions than actual places of production. M. Kazanski and P. Périn, 'Le mobilier funéraire de la tombe de Childéric I^{er}: état de la question et perspectives', *Revue archéologique de Picardie* 3/4 (1988), 13–38, present a sensible discussion of some of the issues.
 - 21 Adams (n. 19), 37–8.
 - 22 *Ibid.*, 36–7, Hunnic depositions at Pannonhalma in Hungary (c. 425–54) and Voshod (Pokrovsk) on the Volga (late 5th or first half of the 6th century). Recently the Voshod pommel has been seen as evidence of a reflux movement of the Huns to the east (A.V. Komar, 'Aktual'nye problemy khronologii material'noj kul'tury Gunnskogo Vremeni Vostochnoj Evropy', *Stepi Evropy v Épohu Srednevekov'ja*, Trudy po archeologii, vol. 1, Sbornik statej, Doneck, 2001, 19–53, at 44, fig. 4–11). Gypsum pastes were also used on the *cloisonné* ornaments in the high-status Ostrogothic/Gepid graves at Apahida and on an Ostrogothic-period belt buckle from Italy in the British Museum (Arrhenius (n. 17), 203), which could suggest a path for the development of this workshop tradition.
 - 23 Menghin's Group B: W. Menghin, *Das Schwert im frühen Mittelalter*, Stuttgart, 1983, 32–6, 58–9, 154–60. On chronological issues, see: P. Périn, 'Les tombes de "chefs" du début de l'époque mérovingienne. Datation et interprétation historique', in F. Vallet and M. Kazanski (eds), *La noblesse romaine et les chefs barbares du III^e au VII^e siècle*, AFAM, Saint-Germain-en-Laye, 1995, 189–205. On the 'Byzantine' origin of these weapons: H.W. Böhme, 'Der Frankenkönig Childeric zwischen Attila und Aëtius. Zu den Goldgriffspathen der Merowingerzeit', *Festschrift für Otto-Hermann Frey zum 65. Geburtstag*, Marburger Studien zur Vor- und Frühgeschichte 16 (1994), 71–110, at 80–2. In one case, the high-status grave at Blučina, Czech Republic, the belt buckle accompanying the sword has two stepped rhomboids in white glass (Böhme, *ibid.*, abb. 20.21). On the problem of associating removable sword fittings with ethnicity in burials: F. Theuvs and M. Alkemade, 'A Kind of Mirror for Men: Sword Depositions in Late Antique Northern Gaul', in F. Theuvs and J. Nelson (eds), *Rituals of Power from Late Antiquity to the Early Middle Ages*, Leiden, 2000, 401–76.
 - 24 Menghin (n. 23), 59, 67, 312, Type Krefeld-Gellep-Stora Sandviken.
 - 25 R. Pirling, 'Ein fränkisches Fürstengrab aus Krefeld-Gellep', *Germania* 42 (1964), 188–216, at 194–6, 209–10, tafn 47.3 and 51.1 (*terminus post quem* of 518 from a *solidus* of Anastasius I); Menghin (n. 23), 239–40.
 - 26 A. Nørgård-Jørgensen, *Waffen und Gräber, Typologische und chronologische Studien zu skandinavischen Waffengräbern 520/30 bis 900 n. Chr.*, Copenhagen, 1999, SP3b, 70–71, 165, abb. III, 133 (dated here to Stufe III [560/70–600] in Ament's fundamental chronology of Early Medieval material culture (H. Ament, 'Chronologische Untersuchungen an fränkischen Gräberfeldern der jüngeren Merowingerzeit im Rheinland', *BerichtRGK* 57 (1976), 285–336).
 - 27 Arrhenius (n. 17), 142–5, figs 166–76 and frontispiece colour plate.
 - 28 Menghin (n. 23), 311–17, listen A12c and A12e, karten 2–3. Only two examples have been found in Frankia and the ever increasing number of Anglo-Saxon gold sword and scabbard mounts being found in England again suggests that pastes in this period may reveal more about workshop traditions than fixed places of production.
 - 29 Cf. a rectangular belt buckle (Thaw Collection, on loan to the J. Pierpont Morgan Library, New York); V. Bierbrauer, *Die ostgotischen Grab- und Schatzfunde in Italien*, Spoleto, 1975, taf. 3.5; V. Bierbrauer, 'Die Ostgoten in Italy', in H. Roth (ed.), *Kunst der Völkerwanderungszeit, Propyläen Kunstgeschichte*, Frankfurt, 1979, 161, no. 71b: an Ostrogothic belt buckle with green glass stepped rhomboids in the British Museum (PE 1865.3–18.1).
 - 30 J. Lafaurie, 'Le trésor de Gourdon (Saône-et-Loire)', *Bulletin de la Société Nationale des Antiquaires de France* (1958), 61–76, buried with around 100 imperial and pseudo-imperial gold coins, of which the latest were of Justin I (r. 518–27), dated 524.
 - 31 *Belt mounts*: Bruce-Mitford (n. 2), 460–5, figs 327, 330–1; L. Nees, 'Weaving garnets: thoughts about two 'excessively rare' belt mounts from Sutton Hoo', in R. Ross (ed.) *Making and Meaning in Insular Art*, Dublin, 2007, 1–17. The latter article makes no reference to comparable belt fittings on the Continent or current material culture chronologies. *Pommels*: staffordshirehoard.org.uk, K 292, K 674. The Staffordshire hoard, found in 2009 by a metal detectorist, consists of over 1,600 Anglo-Saxon objects, including 68 gold pommels. At the time of writing the majority of objects remain uncleaned awaiting treasure valuation, making their exact patterns difficult to determine. K 292 appears to have a pattern of rhomboids centered within circles while K 674 has an overall pattern of mushroom cells on one side and a panel with stepped rhomboids on the other.
 - 32 W. Janssen, *Das fränkische Reihengräberfeld von Rödingen, Kr. Düren*, Germanische Denkmäler der Völkerwanderungszeit, Ser. B, Bd. 16, Stuttgart, 1993, 183–5, tafn 4 and 5 and 185.
 - 33 U. Koch, *Das Reihengräberfeld bei Schretzheim*, Germanische Denkmäler der Völkerwanderungszeit, Ser. A, Bd. 13, Berlin, 1977, Teil 1, 31–2, 100–02, abb 20.6, 8–9; Teil 2, tafn 29 and 200.
 - 34 *Ibid.*, Teil 1, 21–24, 101. Compare also the recent find of a boar-head pommel from Staffordshire (n. 52).
 - 35 *Ibid.*, Teil 1, 23–5. Schretzheim Stufe 3 corresponds to Ament's Stufe III (560/70–600; n. 26 above). U. Müssemeier, E. Nieveler, R. Plum and H. Pöppelmann, *Chronologie der merowingerzeitlichen Grabfunde vom linken Niederrhein bis zur nördlichen Eifel*, Cologne and Bonn, 2003, 43, phase 5 (565/580/90), abb. 7, Spa3; M. Herget, *Das fränkische Gräberfeld von Rödingen, Kr. Düren, Chronologie und Belegungsabfolge*, Marburger Studien zur Vor- und Frühgeschichte 22, Rahden, 2006, 124–5. See also Menghin (n. 23), 145–9, fig. 85, 256, no. 108, 359, List CII.
 - 36 P. Paulsen, *Alamannische Adelsgräber von Niederstotzingen (Kreis Heidenheim)*, Stuttgart, 1967, Grave 9, 36, abb. 11–13; R. Christlein, *Die Alamannen*, Stuttgart, 1979, nos 234, 264, tafn 78, 82. Koch (n. 33), Teil 1, 25, placed Niederstotzingen Grave 9 in the period corresponding to Schretzheim Stufe 3.
 - 37 H. Roth, 'The Silver-Inlaid Iron Belt Fittings in the Morgan Collection', in K. Reynolds-Brown, D. Kidd and C.T. Little (eds), *From Attila to Charlemagne, Art of the Early Medieval Period in the Metropolitan Museum of Art*, New York, 2000, 292–307, at 303, 306.
 - 38 For an excavated example, see: H. Geisler, *Das frühbairische Gräberfeld Straubing-Bajuwarenstraße 1*, Rahden/Westf., 1998, Grave 667, 240–2, tafn 235 and 357, nos 24–5.
 - 39 Bruce-Mitford (n. 2), 582–90, 594–9, '...the tell-tale insular millefiori inlays'.
 - 40 M. Bimson, 'Aspects of the technology of glass and of copper alloys', in R.L.S. Bruce-Mitford (ed. A.C. Evans), *The Sutton Hoo Ship Burial*, Vol. 3. II, London, 1983, 924–44.
 - 41 *Ibid.*, 934–6, 944.
 - 42 Recent excavation of a glass-working site at Maastricht produced rods of glass similar to those used for *millefiori*, but no evidence of *millefiori* production. The composition of the white glasses, however, was similar to that in the Sutton Hoo *millefiori* and other Anglo-Saxon glass beads, rather than Celtic glass (Y. Sablerolle, J. Henderson and W. Dijkman, 'Early medieval glass bead making in Maastricht (Jodenstraat 30), the Netherlands. An archaeological and scientific investigation', in U. von Freeden and A. Wiczorek (eds), *Perlen. Archäologie, Techniken, Analysen, Kolloquien zur Vor- und Frühgeschichte* 1, Bonn, 1997, 293–313, at 308).
 - 43 G. Speake, 'A seventh-century coin-pendant from Bacton, Norfolk, and its ornament', *Medieval Archaeology* 14 (1970), 1–16; R.L.S. Bruce-Mitford, *Aspects of Anglo-Saxon Archaeology*, London, 1974, 270–5, pls 88, 90a–c and 91; L. Webster and J. Backhouse (eds), *The Making of England, Anglo-Saxon Art and Culture AD 600–900*, London, 1991, 57, no. 41 (a gold pyramidal scabbard mount with interlaced zoomorphs in garnet); *Treasure Annual Report 2005/6*, British Museum and DCMS, 2009, 95, 340, cat. no. 285 (buckle tongue-shield, Thurnham, Kent); Staffordshire hoard (n. 31): K 449 (sword hilt mount). It is not yet clear whether the recent metal detector finds cited in the latter three references emanate from a goldsmith or workshop related to the one which produced the Sutton Hoo ornaments.
 - 44 K. Høilund Nielsen, 'Animal Style – a Symbol of Might and Myth. Salin's Style II in a European Context', *Acta Archaeologica* 69 (1998), 1–52, at 8, 10, 12, fig. 48–h.
 - 45 G. Speake, *Anglo-Saxon Animal Art and its Germanic Background*,

- Oxford, 1980, 46, fig. 16f–g; cf. Paulsen (n. 36), abb 44.2–3. Cf. also *ibid.*, figs 16 m and k (the bodies and heads on a brooch from Nocera Umbra grave 37 and the jaws on a brooch from Toscana). On Crundale and Allington: *ibid.*, n. 15 on 40, 45–6, 62, figs 3h, 8b, 8j and pls 14b and 15b. Further examples of zoomorphs with eyes at the tops of their heads appear on the Staffordshire hoard material (n. 31): nos K 130, K 567, K 662.
- 46 Bruce-Mitford (n. 40); *idem.* (n. 2), 598–9; Staffordshire hoard (n. 31) examples include nos K 130, K 284, K 449, K 451, K 452, K 660.
- 47 Arrhenius (n. 17), 125, 181–2, fig. 217; I.P. Zaseckaja, ‘To the Dating of the Dagger from Borovoye-Lake find in Kazakhstan’, in F. Vallet and M. Kazanski (eds), *L’armée romaine et les barbares du III^e au VII^e siècle*, A.F.A.M., Saint-Germain-en-Laye, 1993, 437–43, fig. 6 (6th century); I.O. Gavrituchin, ‘Chronologija ‘sredneavarskogo’ perioda’, in *Stepi Evrope v Épohu Srednevekov’ja*, Trudy po archeologii, vol. 2, Hazarskoe vremja, Doneck, 2001, 113, fig. 40 (late 6th – first decades of the 7th century).
- 48 N. Whitfield, ‘Filigree Animal Ornament from Ireland and Scotland of the Late-Seventh to Ninth Centuries’, in E. Karkov, M. Ryan and R.T. Farrell (eds), *The Insular Tradition*, Albany, New York, 211–44, 212–3, fig. 1.1, pl. 11.2. The combination of sections of filigree interlace with *cloisonné* appears on the 6th-century Skodborg brooch (E. Bakka, ‘Die Nordgermanen in Western Skandinavien’, in Roth (n. 29), 243–54, at 253, taf. 189, with late Style I filigree); high-status Anglo-Saxon pieces in the Kentish tradition (Webster and Backhouse (n. 43), 26, 49–50, nos 9, and 31a and 32a), as well as early Lombardic disc-brooches (G. Monaco, *Oreficerie longobarde a Parma*, Parma, 1955, 19–21, tavv. 1–4, colour pl. opposite 8).
- 49 T.W. Potter, *Roman Britain*, Trustees of the British Museum, London, 1997, 9, 57, figs 2 and 40.
- 50 S.C. Hawkes, ‘Soldiers and Settlers in Britain, Fourth to Fifth Century, With a Catalogue of Animal-Ornamented Buckles and Related Belt-Fittings by S.C. Hawkes and G.C. Dunning’, *Medieval Archaeology* 5 (1961), 1–70, at 29–31, fig. 10.
- 51 Webster and Backhouse (n. 43), 59–60, no. 46; Marzinzik (n. 1), 40–2, no. 20.
- 52 Arrhenius (n. 17), figs 169–70, 173; Menghin (n. 23), 316–17, nos 75, 101. Staffordshire hoard (n. 31), example: K 711; the opposite side has zoomorphs forming a face mask. Similar animal heads are also incorporated into the Lombardic *cloisonné* brooch from Parma, Italy (Monaco (n. 48)).
- 53 Menghin (n. 23), 46, figs 18–19; U. Koch, *Das alamannisch-fränkische Gräberfeld bei Pleidelsheim*, Stuttgart, 2001, grave 64, 284–7, abb. 115–17, taf. 25.7–8, 578–9, types 12.37.10–11 and 12.38.3; Müssemeier et al. (n. 35), Typ Gür8A, 22, 105, abb. 7, Phases 5 (c. 565–580/90) and 6 (580/90 – 610/20).
- 54 Speake (n. 43), 78–91, figs 58 and i, 61, 12g; Arrhenius (n. 17), 146, figs 157–63, 169–73; A. Kiss, *Das awarenzeitliche Gräberfeld in Kölked-Feketekapu B*, Monumenta Avarorum Archaeologica 6, Budapest, 2001, 331–2, abb. 149, farb. taf. V.4 and 303–4, abb. 131; E. Wamers, ‘Salins Stil II auf christlichen Gegenständen’, *Zeitschrift für Archäologie des Mittelalters* 36 (2008), 33–72, at 46–50, abb. 11.
- 55 On Germanic animal symbols: B. Ambrosiani, ‘Regalia and symbols in the boat graves’, in Lamm and Nordström (n. 149), 23–9, at 26. The boar was the animal symbol of the goddess Freyr. See also Høiland Nielsen (n. 44), 10 who draws attention to the fact that the helmet at Vendel I has eagles on one side of the helmet and boars on the other. On steppe conventions: see the addorsed boars on an eastern Scythian belt mount of the 4th–3rd centuries BC (P.R.S. Moorey, E.C. Bunker, E. Porada and G. Markoe, *Ancient Bronzes, Ceramics and Seals*, Los Angeles, 1981, 156, no. 834) and their descendants on eastern Germanic silver mounts from the Black Sea in the Römisch-Germanisches Museum, Cologne, inv. no. D271–2.
- 56 I am grateful to Emma Bunker for pointing out that animals with dangling legs and feet not touching the ground are an ancient convention in steppe art, used to signify that the animal is dead.
- 57 The limp yet naturalistic pose, for example, recalls that of the famous 15th- and 16th-century insignia worn by members of the Order of the Golden Fleece. The early pictorial evidence in: R. de Vilanova de Roselló and F. Domenech y Roura, *Capitolo del Toison de Oro celebrado en Barcelona el año 1519*, Barcelona, 1930. Illustrations of key surviving objects in: S. Harold, ‘The Thedinghsweert Golden Fleece of the van Egmonds’, at <http://www.antiquesatoz.com/sgfleece/thedingfleece.htm>.
- 58 H. Bullinger, *Spätantike Gürtelbeschlüge*, Diss. Arch. Gandenses 12, Bruges, 1969, abb. 30, tafn xxxv.2 and xlv; H.W. Böhme, ‘Germanische Grabfunde des 4. bis 5. Jahrhunderts zwischen unterer Elbe und Loire’, *Münchner Beiträge zur Vor- und Frühgeschichte* 19 (1974), 59, 84, Karte 11. A large fragmentary buckle plate of this type was found at Snodland, Kent (British Museum, PE 1928.0511.1): S. Chadwick-Hawkes, ‘Krieger und Siedler in Britannien während des 4. und 5. Jahrhunderts’, *BerRGZM* 43–4 (1962–3) (1964), 155–231, taf. 60.1.
- 59 Bullinger (n. 58), abb. 30 (Sammlung Diergardt, Köln); G. Behrens, ‘Spätromische Kerbschnittschnallen’, *Schumacher-Festschrift*, Mainz, 1930, 202, no. 57, abb. 8 (Dunapentele); I. Undset, ‘Archäologische Aufsätze über südeuropäische Fundstücke’, *Zeitschrift für Ethnologie* 23 (1891), 14–38, 31–2, fig. 37 (?Rome, Castellani collection).
- 60 Behrens (n. 59), 287, taf. 31 and Böhme (n. 58), 282, taf. 81.7–11 (Krefeld-Gellep-?circus wrestlers); Bullinger (n. 58), taf. xxxv.2 (Muthmanskopf – angel flying above a horse); Undset (n. 59), fig. 37 (Rome – Venus with rose or fruit); ‘Museographie über das Jahr 1896. Rheinprovinz, Trier’, *Westdeutsche Zeitschrift für Geschichte und Kunst* xvi (1897), 362–3 (?Trier – shepherd and two sheep).
- 61 Böhme (n. 58), 83, Stufe II (380–420), revised now to the first third of the 5th century (M. Welch, ‘Relating Anglo-Saxon Chronology to Continental Chronologies in the Fifth Century AD’, in U. von Freeden, U. Koch and A. Wiczorek (eds), *Völker an Nord- und Ostsee und die Franken*, Bonn, 1999, 31–8, at 33–4).
- 62 See, however, M. Hoper and H. Steuer, ‘Eine völkerwanderungszeitliche Höhenstation am Oberrhein – der Geißkopf bei Berghaupten, Ortnaukreis, Höhensiedlung, Kultplatz oder Militärlager?’, *Germania* 77/1 (1999), 185–246, at 212, 228–9, abb. 17, two examples with scenes of circus animals in combat excavated at a militarised outpost occupied from the second half of the 4th to the first half of the 5th century.
- 63 Böhme in H.W. Böhme et al. (eds), *À l’aube de la France: la Gaule de Constantin à Childéric*, Paris, 1981, 203, no. 338, fig. 141. Some of the finest surviving examples in silver, gilt silver and niello, have been found, not on the *limes*, but in Rome: M. S. Arena, P. Delogu, L. Paroli, M. Ricci, L. Sagui and L. Venditelli (hereafter Arena et al.), *Roma dell’Antichità al Medioevo Archeologia e Storia nel Museo Nazionale Romano Crypta Balbi*, Milan, 2001, 176–7, nos 1.3.g.6–8.
- 64 Cf. late 4th/early 5th century marriage portrait rings (M.C. Ross, *Catalogue of the Byzantine and Early Medieval Antiquities in the Dumbarton Oaks Collection*, Vol. Two, Jewelry, Enamels and Art of the Migration Period, Washington DC, 1965, 48–51, pl. xxxix, nos 50–2).
- 65 N. Adams, ‘Hanging basins and the wine-coloured sea: the wider context of early Medieval hanging bowls’, in A. Reynolds and L. Webster (eds), *Early Medieval Art and Archaeology in the Northern World: Studies in Honour of James Graham Campbell*, Leiden, in press.
- 66 G.T. Dennis (trans.), *Maurice’s Strategikon*, *Handbook of Byzantine Military Strategy*, Philadelphia, 1984, D, 165.
- 67 Bruce-Mitford (n. 2), 523, 526–7, fig. 392. The figure cited on 523 is correct. See also Bruce-Mitford (n. 1), 520, fig. 387.
- 68 *Ibid.* (n. 1), 519: ‘sewn on to the thick cloth or leather garment as implied by the numerous strong and deep staples on their backs’. The argument for stitching to a ‘leather tunic’ or ‘leather cuirass’ is repeated in G. Owen-Crocker, *Dress in Anglo-Saxon England*, Woodbridge, 2004, 113. Apparently Bruce-Mitford envisioned something like split pins inserted into each individual loop in the manner of the fastening of a cap badge.
- 69 P. Fjellström, *Lapskt silver*, 2 vols, Stockholm, 1962, 148 (Norwegian leather belt) and pl. 5.9–10 (Lapp belt); J. Fossberg, *Draktsølv*, Oslo, 1991, 187 (Lapp leather belt). I am very grateful to Jane Perry for her discussion on this point at the conference and for these and the references in the following footnote. It is very clear that, at least in the modern period, ornaments which were sewn into place were pierced with stitching holes around the edges rather than having loops.
- 70 T. Balogh-Horvath, *Hungarian Folk Jewelry*, Budapest, 1983, 53; J. Perry, *A collector’s guide to peasant silver buttons*, Lulu.com, 2007, 1.10.g and 1.8.c.
- 71 Bruce-Mitford (n. 2), 294–7, figs 222b and 223 (scabbard mounts).
- 72 Integral pierced lugs appear on the majority of Byzantine buckle forms in the early 6th century: M. Schulze-Dörlamm, *Byzantinische Gürtelschnallen und Gürtelbeschlüge im Römisch-*

- Germanischen Zentralmuseum. Teil 1, Mainz, 2002, 240–5. In the West, the shift can be documented in the excavated sequence of Visigothic belt buckles. In Ripoll López's chronological scheme, rivets were in use between c. 480–560 (Level II–III); from c. 580–600 (Level IV) both lugged and riveted systems were in use and from c. 640 onwards (Level V), pierced lug systems predominate: G. Ripoll López, 'Materiales funerarios de la Hispania Visigoda: problemas de cronología y tipología', in P. Périn (ed.), *Gallo-Romains, Wisigoths et Francs en Aquitaine, Septimanie et Espagne*, A.F.A.M., Rouen, 1991, 113–32.
- 73 Sixth- and 5th-century BC Scythian examples: M.I. Artamanov, *The Splendor of Scythian Art*, New York and London, 1969, pls 62, 73–5, 264–5. A 3rd-century BC Greek example: S. Künzl, 'Ein griechisches Goldmedaillon aus Makedonien', *JbRGZM* 47/1 (2000) (2002), 329–35, taf. 27 and farbtaf. 1.1, and M. Fecht, S. Greiff and U. Herz, 'Untersuchungen zu antiken Herstellungstechniken am Beispiel eines griechischen Goldmedaillons', *ibid.*, 337–53, abb. 1. See also n. 96 below for 1st century AD examples on nomadic jewellery from Bactria.
- 74 S. Bezuglov and I. Zacharov, 'Bogatoe pogrebenie pozdnerimskogo vremeni bliz Tanaisa', *Isvestija Rostovskogo Oblastnogo Muzeja Kraevedenija* 6 (1989), 42–66, at 44, 56–9, figs 2.1 and 4.1; Adams (n. 19), 27, from a grave at Nedvigovka on the site of the cemetery of the ancient city of Tanais on the Don.
- 75 É. Garam, 'Über die Beziehung der byzantinischen Goldschnallen und der awarenzeitlichen Pseudoschnallen', in Bálint (n. 19), 216–27, at 221–7, fig. 3; J. Werner, 'Byzantinische Gürtelschnallen des 6. und 7. Jahrhunderts aus der Sammlung Diergardt', *Kölner Jahrbuch für Vor- und Frühgeschichte* 1 (1955), 36–48, at 41, taf. 6, 9a–c and 37, taf. 4.8; A. Bank, *Byzantine Art in the Hermitage Museum*, Leningrad, 1960, 348, no. 105 (said to be from 'Mersin' in Cilicia, late 6th century); Ross (n. 64), 4–6, no. 2C, pl. VII.2 (Latakia, Syria); 7–8, no. 4F pl. X.F (?Constantinople); 8–10, no. 5, pl. XI.A and B (Sicily) and 10–12, no. 6H, pl. XIV (Constantinople or Syria); A. Garside (ed.), *Jewelry. Ancient to Modern*, Walters Art Gallery, New York, 1980, 153, nos 431–2 (Hamah, Syria); A.I. Aïbabin, 'Chronologiya mogil'nikov Krimea pozdnerimskogo i rannesrednevekovogo vremeni', *Materialy po archeologii, istorii i etnografii Tavrii* 1 (1990), 42, fig. 43 (gold, Eski-kermen sklep 273, 7th century); Cs. Bálint, 'Kontakte zwischen Iran, Byzanz und der Steppe', in F. Daim (ed.), *Awarenforschung I*, Vienna, 1992, taf. 28.23; A. Gonosová and C. Kondoleon, *Art of Late Rome and Byzantium in the Virginia Museum of Fine Arts*, Richmond, 1994, 144–7, no. 53; Arena *et al.* (n. 63), 373–4, no. II.4.586.
- 76 See Entwistle, this volume, no. 2, dated stylistically to the 7th century.
- 77 Garam (n. 75), fig. 1.2; Aïbabin (n. 75), 47, fig. 44.4 (Lučistoe, sklep 10, 7th century). See also M.M.P. Abramova, 'Novye materialy rannesrednevekovykh mogil'nikov Severnogo Kavkaza', *Sovetskaja Archeologija* 9 (1982/2), 135–55, at 138, 146, fig. 3.24 and fig. 4 for an enamelled example excavated in a late 7th–early 8th century grave at Direktorskaja Gorka in the northern Caucasus.
- 78 É. Garam, 'Die münzdatierten Gräber der Awarenzeit', in Daim (n. 75), 135–307, at 137–8, tafn 1 and 2. **See Daim, this volume, Pl. 5.**
- 79 Schulze-Dörrlamm (n. 72), 71–2, abb. 26.
- 80 E.H. Tóth and A. Horváth, *Kunbábony. Das Grab eines Awarenkhanen*, Kecskemét, 1992, 97–108, 110–11, cat. nos 1–6, 11–12, tafn II–IV. **See Bálint, this volume, Pls. 28 and 33.**
- 81 I. Popović, *Zlatni avarski pojasci iz okolin Sirmijuma (Golden Avarian Belt from the Vicinity of Sirmium)*, Belgrade, 1997, figs 1–6, 8, 11, 14, 16, 24, 26, 27, 29, 35b.
- 82 V. Zalesskaya, Z. Lvova, B. Marshak, Y. Molodkovets, *The Treasures of Khan Kubrat*, St Petersburg, 1997, 105–7, nos 38–48, fittings and pseudo-buckle-shaped belt mounts.
- 83 N. Fettich, 'Die Metallkunst der landnehmenden Ungarn', *Archaeologica Hungarica* XXI (1937), pl. CXIX.
- 84 Further examples in Fettich (*ibid.*), pl. CXXVIII.1; É. Garam, *Funde byzantinischer Herkunft in der Awarenzeit von Ende des 6. bis zum Ende des 7. Jahrhunderts*, Monumenta Avarorum Archaeologica, vol. 5, Budapest, 2001, 88–90, taf. 3. It is notable that other belt buckles of 'Byzantine' type found in Avaric graves of lesser status were manufactured with pierced lugs rather than loops (*ibid.*, 2001, taf. 54.2.4 and tafn 55–74) while many ordinary copper-alloy belt mounts of the Avaric period continued to be attached by means of domed rivets (Fettich (*ibid.*), *passim*).
- 85 R. Mengarelli, 'La necropoli barbarica di Castel Trosino', *Monumenti antichi della Accademia dei Lincei* 12 (1902), 145–380, at 237–8, figs 93, 95 (Tomb 37.5); 262–3 and 266, figs 129–31 and 134 (Tomb 90.11, 15–16 and 21); 286–7, figs 167, 170–2 (Tomb 119.15 and 18–20); 325, fig. 232 (Tomb 178.4); P. Pasqui and R. Paribeni, 'Necropoli barbarica di Nocera Umbra', *Monumenti antichi della Accademia dei Lincei* 25 (1918), 138–352, at 163, fig. 7 (Tomb 1); 250–1, figs 100 and 101 (Tombs 53–4) and 283, fig. 143 (Tomb 85); O. von Hessen, *Secondo contributo all' archeologia longobarda in Toscana. Reperta isolate e di provenienza incerta*, Accademia Toscana de Scienze e Lettere 'La Colombaria' Studi XLI (1975), 14–15, fig. 1.2 (Chiusi); Arena *et al.* (n. 63), 374–5, no. II.4.586.
- 86 Cs. Bálint, 'Vestiges archéologiques de l'époque tardive des Sassanides et leurs relations avec les peuples des steppes', *Acta Archaeologica Academiae Scientiarum Hungaricae* XXX/1–2 (1978), 173–212, figs 8.2, 4, 15, 20, 22 and 14.9a; Bálint in Daim (n. 75), 309–507.
- 87 Paulsen (n. 36), 62–3. O. von Hessen, *Primo contributo all' archeologia longobarda in Toscana. Le necropoli*, Accademia Toscana de Scienze e Lettere 'La Colombaria' Studi XVIII (1971), 31, tav. 10 (Arcia Tomb 5); and possibly 74–5, tavv. 38–9 (Gracia Tombs 50, 60). See also the discussion by Cs. Bálint on *Preßblech* in this volume.
- 88 Compare the range of mounts illustrated by Paulsen (n. 36), abb. 30.2 and see n. 84 above.
- 89 M. Fleury and A. France-Lanord, *Les trésors mérovingiens de la Basilique de Saint-Denis*, Luxembourg, 1998, 262, II–26–8, 31; the square belt plaque was made with loops while the accompanying buckle and counterplate were made with pierced lugs concealed under separately made domes on the upper side. The locking mechanism of the Sutton Hoo great gold buckle was made in the same manner: Bruce-Mitford (n. 2), 538–9, figs 398–9.
- 90 J. Stevens, 'On the remains found in an Anglo-Saxon tumulus at Taplow, Bucks', *Journal of the British Archaeological Association* XL (1884), 61–71; L. Webster in Webster and Backhouse (n. 43), 55–6; L. Webster, 'Taplow', *Reallexikon der Germanischen Altertumskunde* Bd. 35 (2007), 69–72. The grave goods included a sword, two shields, a barbed throwing spear and two further spears, a gold buckle with a *cloisonné* loop, drinking horns, four stemmed glasses, a footed bronze vessel, a lyre, gaming pieces, a cauldron and tubs as well as a large quantity of gold braid in two sizes from garments.
- 91 They are flat, not curved, as Bruce-Mitford's photograph and text (n. 2, 534, pl. 22b) misleadingly suggest.
- 92 Given the antiquarian nature of the Taplow excavation, there are no particularly satisfactory grave plans. The 1843 plan preserved in the notebooks kept by Dr John Stevens, who was present at the excavation, is more accurate than the later 1882 plan with a corpse inserted amongst the grave goods, which have been adjusted to correspond to the body (cf. Bruce-Mitford (n. 40), 704, figs 509 and 716, fig. 523b). A third grave plan also exists. I am grateful to Leslie Webster, who is preparing a monograph on the grave, for her opinion regarding the validity of these plans and for information regarding the textile and leather associated with the clasps.
- 93 Webster 2007 (n. 90), 70.
- 94 Stevens (n. 90), 65–6. The corpse was not buried in a coffin, but was on a bier. It is possible that this was also the situation in Mound 1 at Sutton Hoo.
- 95 The latter, a device typical of riveted attachment systems, is also found on the buckle from Grave 11 at Saint-Denis: Fleury and France-Lanord (n. 89), 262, II–26–7.
- 96 V. Sarianidi, *The Golden Hoard of Bactria from the Tillya-tepe. Excavations in Northern Afghanistan*, New York, 1985, 20–34, 46–53, ill. on 12. These outer garments were spangled with small gold and inlaid garment plaques, pierced and stitched into place. V. Schlitz, 'Tillya Tepe, the Hill of Gold: A Nomad Necropolis', in F. Hiebert and P. Cambon (eds), *Afghanistan, Hidden Treasures from the National Museum Kabul*, Washington DC, 2008, 219–93, at 234, 244, 254–6 and 286, nos 37, 39, 79–80, 136; see also 266, no. 106, shoe or trouser ankle discs with loops found in Tomb IV, the male grave in the complex.
- 97 A.M. Apakidze *et al.*, *Mcheta. Itogi archeologičeskix issledovanii. Archeologičeskije pamyatniki Armazis-chevi po raskopkam 1937–46* g.g., Tbilisi, 1958, 103, fig. 52, no. 18a–b, col. pl. X.1, pl. lxxx.1; A. Javakhishvili and G. Abramishvili, *Jewellery and Metalwork in the Museums of Georgia*, Leningrad, 1986, 50. As at Tillya Tepe, 111 rosette-shaped garment plaques set with garnets and over 5,000

- smaller gold plaques studded the clothing. A large circular agate in a gold mount was also attached by rows of loops (*ibid.*, 1958, fig. 52, nos 19a–c). This is considered to be the burial place of the regional families (the *eristhavi* or *pitiaxes*) ruling when Iberia was under the political and cultural sway of the Parthians.
- 98 B. Musche, *Vorderasiatischer Schmuck zur Zeit der Arsakiden und der Sasaniden*, Leiden, 1988, 271, no. 14, taf. xcvi. She classed the piece with belt buckles, but in form and function it is closer to her class of symmetrical male cloak clasps, known only from sculptural representations at Nemrūd Dağ and Hatra (*ibid.*, 269–70, nos 1.2.4.2.1–II, taf. xcvi).
 - 99 State Museum of Georgia, Tbilisi, inv. no. 41–64:5. I am grateful to the late O.M. Lordkipanidze and A. Jakashishvili for allowing me to examine and photograph these pieces during my study visit to Georgia financed by a British Academy Small Research Fund Grant in 1997.
 - 100 E. Errington and J. Cribb (eds), *The Crossroads of Asia. Transformation in Image and Symbol in the Art of Ancient Afghanistan and Pakistan*, Cambridge, 1992, 148–9. The entry notes that paired clasps of similar shape are depicted as cape and cloak closures on Sasanian sculptures in Iran.
 - 101 Abbé Cochet, *Le tombeau de Childéric I.^{er} roi des Francs*, Paris, 1859, 195–6, fig. 7; J. Werner, ‘Neue Analyse des Childerichgrabes von Tournai (Kurzfassung)’, *Rheinische Vierteljahrsblätter* 35 (1971), 43–6, at 45.
 - 102 Arrhenius (n. 17), 100, 106–13; Kazanski and Périn (n. 20), 22; Adams (n. 19), 37–8.
 - 103 Current scholarship (Kazanski and Périn [n. 20], 17) tends to follow the hypothesis advanced by K. Böhner (summarised in ‘Childerich von Tournai (Childerichgrab)’, *Reallexikon der Germanischen Altertumskunde* 3/4 [1981], 441–60) that the bees or cicadas served as horse harness ornaments; M. Schulze-Dörlamm has recently suggested that the ox mount was a plume holder for a bridle (‘Beigaben aus dem Grab des Frankenkönigs Childerich in Tournai, Belgien’, *Jahresbericht des RGZM* 47/2 (2000, Mainz 2002), 757–8). Given the evidence assembled in this paper, the possibility that some of the small ornaments with loops were personal ornaments as Werner (n. 101) suggested, attached to belts, garments, headgear or even armour, which we cannot now easily reconstruct, should not be completely rejected.
 - 104 B. Kürti and E. Wicker, ‘Bemerkungen zur Agraffenfrage der Awarenzeit’, *Zalai Múzeum* 3 (1991), 19–35; Cs. Balogh, ‘Az Avar kori préselt, lemezes boglárók (Die Awarenzeitlichen gepressten blechernen Agraffen)’, *A Móra Ferenc Múzeum Évkönyve Studia Archaeologica* VI (2000), 219–35. Taking the form of paired discs, ovals or squares, they were manufactured in gold, silver and copper-alloy, and sometimes inlaid with glass. High-status examples in gold are decorated with granulation, filigree wire and set with precious stones (Garam (n. 84), 51–7, fig. 5, tafn 34, 36–5, 37; farbtafn XIX.3 and XX.1–2).
 - 105 Balogh (n. 104), 229. The 8th-century Avaric clasps from Dunapataj in Hungary and the late 7th–early 8th-century clasps from Romanovskaja stanica (Rostov-on-Don) are decorated with classicising ornament which is certainly Byzantine in origin: Kürti and Wicker (n. 104), taf. 37 and XX.2; É. Garam, ‘Über das awarenzeitliche goldene Agraffenpaar von Dunapataj’, *Folia Archaeologica* 40 (1989), 137–53.
 - 106 Tóth and Horváth (n. 80), abb. 48.1–2, abb. 50.2.
 - 107 Balogh (n. 104), 224–6; Kürti and Wicker (n. 104), 21, suggest this may have been a shoulder cape, citing a Sogdian painting showing such a garment with ends tapering to disc shapes.
 - 108 Owen-Crocker (n. 68), 195–6 and Walton-Rogers (n. 16), 212–13, fig. 5.64, based on the 1882 grave plan (see n. 90) and following the identification (‘belt clasps’) and grave reconstruction by E. Crowfoot and S. Chadwick Hawkes, ‘Early Anglo-Saxon Gold Braids’, *Medieval Archaeology* 11 (1967), 42–86, at 44–50, pl. IX, fig. 12.
 - 109 D. Bénazeth and P. Dal-Prà, ‘Quelques remarques à propos d’un ensemble de vêtement de cavaliers découverts dans des tombes égyptiennes’, in Vallet and Kazanski (n. 47), 367–82, at 368–9; C. Fluck and G. Vogelsang-Eastwood (eds), *Riding Costume in Egypt*, Leiden, 2004. Variations of these garments appear in Sasanian Persian (G. Vogelsang-Eastwood, ‘Sasanian ‘Riding-Coats’: the Iranian Evidence’, in Fluck and Vogelsang-Eastwood (*ibid.*), 209–31) and Central Asian art (A.M. Belenizki, *Mittelasiens Kunst der Sogden*, Leipzig, 1980, no. 15).
 - 110 Bénazeth and Dal-Prà (n. 109), 370. The well-studied fragments from Antinoöplis were made in wool carded to give a soft furry surface, dyed in solid red or blue-green and finished with bands of coloured wool or applied silk. As they were made with non-native cashmere wool and silk, they were either imports or assembled from imported fabrics, following Persian fashion. As so few examples survived in the many thousands of tombs, they have been interpreted as representing the presence of foreigners, perhaps in the service of the emperor. Recent carbon dating places two coats in Berlin between 529–602 and 438–558 (with 68.2% confidence) or 443–637 and 428–600 (with 95.4% confidence) (A. de Moor, M. van Strydonck and C. Verheken-Lammens, ‘Radiocarbon Dating of two Sasanian Coats and three Post-Sasanian Tapestries’, in Fluck and Vogelsang-Eastwood (n. 109), 181–8, at 184).
 - 111 A. Jeroussalimskaja, ‘Le caftan aux simourghs de Mochtechevaja Balka (Caucase Septentrional)’, *Studia Iranica* 7/2 (1978), 183–211.
 - 112 A. Gayet, ‘Compte rendu des fouilles effectuées à Antinoé au cours de l’hiver 1896–97’, *Annales du musée Guimet* 26/3 (1897), 55–62 at 61–2.
 - 113 Arrhenius (n. 17), figs 200 and 202, 163 (published as a pendant as she was unaware of the loops on the reverse); Adams (n. 19), 27, pl. VI.7. Arrhenius (n. 17), 167–8, figs 201 and 204, pointed out the resemblance of the shape to the Childeric ox mount and to similar stylised garnets and garnet *cloisonné* on other Merovingian objects.
 - 114 L. Trümpelmann, ‘Die Sasaniden’, in H. Roth (ed.) *Kunst der Völkerwanderungszeit*, Propyläen Kunstgeschichte IV, Berlin, 1979, 107–20, at 117. Quast’s (D. Quast, ‘Das “Pektorale” von Wolfsheim, Kr. Mainz-Bingen’, *Germania* 77 (1999), 705–18) recent reconstruction of this piece as a bracelet segment is not entirely convincing as the fixed hinge elements on the sides of the central portion of such bracelets are always symmetrical: cf. C. Lepage, ‘Les bracelets de luxe romains et byzantins du II^e au V^e siècle. Étude de la forme et de la structure’, *Cahiers Archéologiques* XXI (1971), 1–23, at 7, figs 13–14; Musche (n. 98), 210, 8.1.1–4, taf. LXXXV; R. Würth and D. Planck (eds), *Die Schraube zwischen Macht und Pracht, Das Gewinde in der Antike*, Sigmaringen, 1995, 120–1, 168–9, nos E.2.3 and E.2.4, abb. 84–5.
 - 115 Adams (n. 19), 22, pl. IV.2, for modern readings of the script.
 - 116 An Yingxin, ‘Xinjiang yili zhaosuxian gumuzang chutu jinyinqi deng zhengui wenwu (The gold and silver unearthed from Zhaosou county, Yili, Xinjiang)’, *Wenwu* 9 (1999), 9, no. 13; A. Koch and B. Anke (eds), *Attila und die Hunnen: Begleitband zur Ausstellung im Historischen Museum der Pfalz, Speyer*, Stuttgart, 2007, 137.
 - 117 Adams (n. 19), 16, Class III, fig. 2 and 39–40, pls IX–X.
 - 118 *Disc-shaped clasps*: V. Kuznecov, ‘Deux tombes Alaines des V^e–VI^e s. à Klin-Yar (Caucase du Nord)’, in M. Kazanski and V. Soupault (eds), *Les sites archéologiques en Crimée et au Caucase durant l’Antiquité tardive et le haut Moyen-Age*, Colloquia Pontica 5, Leiden, 2000, 153–92, at 166, fig. 12 (Kislovodsk); Hôtel Drouot, Paris, *Bijoux-Camées-Intailles*, vendredi 26 Mars 2004, 22–3, no. 140, ex-collection Feuardent, mis-identified as Egyptian. *Rectangular clasps*: T.M. Minaeva, ‘Raskopki svjatilišča iz mogil’nika vozle gorodišča, Giljač v 1965 g.’, in A.K. Ambroz and I. Erdeli (eds), *Drevnosti epohi velikogo pereselenija narodov V–VIII vv*, Moscow, 1982, 222–34, at 230–3, figs 6.7 and 7; A.P. Runič, ‘Zahoronienie voždja epohi rannego Srednevekov’ja iz Kislovodskoi kotloviny’, *Sovetskaja Archeologija* 3 (1976), 256–66, at 264, fig. 5.8–9; Adams forthcoming 2011.
 - 119 Minaeva (n. 118). Accompanying grave goods included glass beads, pottery vessels, a glass cup with blue dots, a Sarmatian-style mirror, and a pair of gold earrings.
 - 120 Runič (n. 118). The extensive grave goods included numerous small buckles and fittings with garnet inlays (one in gold and garnet *cloisonné* with an eagle-head plate), two *fibulae*, a sword with a glass *cloisonné* guard, a Sarmatian-style mirror, beads, a horse bridle, a Hunnic-style hard saddle mount and imported glass vessels with blue dots.
 - 121 M. Kazanski and A. Mastikova, ‘Les éléments germaniques dans la civilisation de la population du Caucases du Nord à l’époque des grandes migrations’, in C. von Carnap-Bornheim (ed.), *Kontakt-Kooperation-Konflikt. Germanen und Sarmaten zwischen dem 1. und dem 4. Jahrhundert nach Christus*, Neumünster, 2003, 135–76, at 146, fig. 9.
 - 122 N. Fettich, ‘A Szeged-Nagyszéksósi hun fejedelmi sírlelet (La

- trouvaille de tombe princière hunnique à Szeged-Nagyszéksós', *Archaeologica Hungarica* XXXII (1953), 148–50, 185, pl. xxxviii.21. The reverse of this has never been published and the piece is mounted in a way so that it cannot now be examined. I am grateful to Dr Anna Jerusolimskaja at the State Hermitage Museum for conveying the latter information to me.
- 123 Adams (n. 19), 38–40, pls VIII.1–2, IX.1b–1e, XI.1–3; M. Kazanski and A. Mastikova, 'Le Caucase du Nord et la région méditerranéenne aux 5^e – 6^e siècles', *Eurasia Antiqua* 5 (1999), 523–73, at 525–7, 529.
- 124 Kazanski and Mastikova (n. 123), 565–6.
- 125 In Anglo-Saxon England alone a little-known group of small hinged clasps with plates in the shape of triangular buckle plates have been found which deserve further study (cf. R.A. Smith, *A Guide to the Anglo-Saxon and Foreign Teutonic Antiquities in the Department of British and Medieval Antiquities*, British Museum, London, 1923, 76, fig. 89).
- 126 L. Tarassuk and C. Blair (eds), *The Complete Encyclopedia of Arms and Weapons*, New York, 1982, 148.
- 127 C.C. Vermeule, 'Hellenistic and Roman Cuirassed Statues', *Berytus* XIII (1959), 1–82; H.R. Robinson, *The Armour of Imperial Rome*, Arms and Armour Press, London, 1975, 147–52.
- 128 A. Hagemann, *Griechische Panzerung, I Teil: Der Metallharnisch*, Leipzig and Berlin, 1919, 33–71, frontispiece, abb. 39, 46–9, 61, 76. Armour in the form of a male torso was developed in the late 6th and early 5th centuries BC; most complete examples come from grave contexts in Magna Graecia, although metal cuirasses and cuirass sections have also been found in Etruscan contexts, at Olympia in Greece and in Scythian territories on the northern shores of the Black Sea.
- 129 Vermeule (n. 127), 13, n.14, draws attention to a Hellenistic relief in the Louvre depicting satyrs making armour at the forge of Hephaistos which includes a finished metal cuirass.
- 130 Hagemann (n. 128), 49, 65, frontispiece and abb. 61.
- 131 As Cameron (n. 16), 26, rightly surmised.
- 132 Vermeule (n. 127), 5, 17–18, 34, no. 13, pl. 3. The straps were perhaps reduced to accommodate the elaborate decorative reliefs on such breastplates. On the Prima Porta statue the straps are represented as riveted at the front; the back is, in common with most cuirassed statuary, left uncarved: cf. H. Kähler, *Die Augustusstatue von Prima Porta*, Cologne, 1959, taf. 10.
- 133 Vermeule (n. 127), *passim*. Short shoulder straps or clasps appear on a few other western statues of Augustan and Julio-Claudian date, but sculptures from the Flavian, Trajanic and Hadrianic periods onwards consistently depict long rectangular straps closer to the older Greek cuirass type.
- 134 Some representations show a strap at the back of the armour where as Robinson (n. 127), 149 notes: it must have been 'permanently fastened and provided the other half of the hinge'.
- 135 S.F. Pfahl, 'Das römische Bronzetropaeum von Lorch und verwandete Stücke', *Fundberichte aus Baden-Württemberg* 18 (1993), 126, no. 6, abb. 5, 1st century. The other functional riveted hinges known on Roman metal armour are located just below the shoulders at the front on *lorica segmentata*, composed of flat and hooped sections of plate. M.C. Bishop (*Lorica Segmentata*, Vol. 1, *A Handbook of Articulated Roman Plate Armour*, JRMES Monograph No. 1, Armatura Press, Duns, Berwickshire, 2002, 1) notes that this is a Renaissance term; the Romans may have referred to these as *lorica lamminata*.
- 136 Vermeule (n. 127), pl. xxvi, 79.
- 137 The term is often cited as deriving from *lorum* (leather straps), based upon a passage in Varro (116 – 27 BC; *De Lingua Latina*, VL.L.5.116): '*lorica quod e loris de corio crudo pectoralia faciebant*', but the etymology is unusual: cf. A. Ernout and A. Meillet, *Dictionnaire Étymologique de la Langue Latine*, Paris, 1967. Cuirass derives from Old French (*cuir*) from the Latin (*corius*, hide or leather) and is first recorded in 12th-century medieval texts: P. Bastien, *Le buste monétaire des empereurs romains*, Wetteren, 1992, 259.
- 138 Vermeule (n. 127), 4–5; Robinson (n. 127), 147. The lack of preservation of Roman period metal cuirasses may be ascribed to different inhumation practices to those of the Greeks and Etruscans and the fact that full muscle cuirasses may never have been produced in quantity. In addition muscle cuirasses worn by officers and the praetorian guard may not have been privately owned.
- 139 P. Couissin, *Les armes romains*, Paris, 1926, 337–8, 439; J. Alfs, 'Der bewegliche Metallpanzer in römischen Heer', *Zeitschrift für Historische Waffen- und Kostümkunde*, nf 7/3–4, 16 (1941), 69–126; A. Gansser-Burckhardt, *Das Leder und seine Verarbeitung im römischen Legionslager Vindonissa*, Veröffentlichungen der Gesellschaft pro Vindonissa, Band 1, Basel, 1942, 44–9.
- 140 H.R. Robinson, 'Roman Body Armour in the First Century AD', in E. Birley, B. Dobson and M. Jarrett (eds), *Roman Frontier Studies 1969*, Cardiff, 1974, 5–12, at 5–6; Robinson (n. 127), 147–8; Tarassuk and Blair (n. 126), 148; Bastien (n. 137), 261; M.C. Bishop and J.C.N. Coulston, *Roman Military Equipment from the Punic Wars to the Fall of Rome*, London, 1993, 19–24. Richardson offers a cogent assessment in M. Beaby and T. Richardson, 'Hardened leather armour', *Royal Armouries Yearbook* 2 (1997), 68–71, observing that medieval leather armour was used in tournaments with weapons of silvered whalebone, not metal.
- 141 One type consists of paired metal sheets of rectangular outline cut away at the neck and secured at the front with turning pins: Robinson (n. 127), 160–61, pls 454–5, figs 163–70; J. Garbsch, *Römische Paraderüstungen*, Munich, 1978, 7–8, 76–80, abb. 5, tafn 34–6; S. James, *The Excavations at Dura-Europos conducted by Yale University and the French Academy of Inscriptions and Letters 1928 to 1937, Final Report VII, The Arms and Armour and other Military Equipment*, London, 2004, 120–22, fig. 62. Another type was made of chest-size copper-alloy sheets with high-relief busts: Garbsch, *ibid.*, taf. 37, no. P28; I. Popović, *La cuirasse romaine d'apparat de Ritopek*, Belgrade, 1993.
- 142 W. Groenman van Waateringe, 'Römische Lederfunde aus Vindonissa und Valkenburg Z.H.: ein Vergleich', *Jahresbericht Gesellschaft Pro Vindonissa* (1974), 62–84.
- 143 Ennodius (473/4–521) in *Panegyricus* VIII.5 describes Theodoric as: *munimentis chalybis pectus includeres*, 'closing his steel breast defence'. The description contrasts with the *ieiunas pectorum crates* (frail ribbed breast [plates]), described a few passages earlier as worn by the Goths fighting the Gepids on their way into Italy.
- 144 Agathias (writing c. 552–9) *Histories* I,9,4 reports that Palladius, one of Narses high-ranking generals, was armoured in an iron breastplate (σιδήρω τε τεθωραχισμένον) when fighting the Goths in Italy; the likelihood of this being solid is diminished by the fact that an arrow ran straight through his shield, breastplate and body (proof of the incredible strength of the bow arms of his adversary, according to Agathias). Procopius (*De Bello Gothico* VIII.xxvi.18), describes the Gothic king Totila, exhorting his army prior to his final battle with the Byzantine governor Narses, as wearing armour abundantly plated with gold. Intriguingly, in order to trick the enemy: 'Immediately before battle, however, he changed his entire equipment and armed himself with all care with the private soldier's equipment' (*De Bello Gothico* VIII. xxxii.2).
- 145 Bruce-Mitford (n. 1), 472–5, figs 354, 359–61; Bruce-Mitford (n. 2), 232–40. On the Anastasius dish: E. Cruikshank Dodd, *Byzantine Silver Stamps. With an excursus on the Comes Sacrarum Largitionum* by J. P. C. Kent (Dumbarton Oaks Studies VII), Washington DC, 1961, 5–7, 58–9, no. 2.
- 146 B. Gilmour, 'Iron Age mail in Britain', *Royal Armouries Yearbook* 2 (1997), 26–35.
- 147 *Frankish*: O. Doppelfeld, 'Das fränkische Knabengrab unter dem Chor des Kölner Doms', *Germania* 42 (1964), 156–88, at 170–6, abb. 11E, taf. 39, deposited c. 530–40; Pirling (n. 25), Krefeld-Gellep grave 1782, 199–200, taf. 53, preserved only on the inside of the earflaps of the *spangenhelm*; K. Böhner, 'Die frühmittelalterliche Spangenhelme und die nordischen Helme der Vendelzeit', *JbRGZM* 41/2 (1994), 471–549, abb. 4 (Morken). *Alamannic*: Paulsen (n. 36), 136, taf. 24–5, 60, 64–5. *Lombardic*: Mengarelli (n. 85), 267–8, fig. 147 (Tomb 90); G.C. Menis (ed.), *I Longobardi*, Milan, 1990, 184–7, nos IV.58as, 58.at and 58bc.
- 148 G. Ardwidsson, *Die Gräberfunde von Valsgärde I, Valsgärde 6*, Uppsala, 1942, 26–35, abb. 23, 27–8, taf. 3; *eadem*, *Die Gräberfunde von Valsgärde III, Valsgärde 7*, Uppsala, 1977, 23, 27, abb. 14, 22; *eadem*, 'Armour of the Vendel Period', *Acta Archaeologica* 10 (1939), 31–59, at 22–8, tafn 1, 6, abb. 10, 12 (Valsgärde 8).
- 149 H. Stolpe and T.J. Arne, *La nécropole de Vendel*, Stockholm, 1927, 18 (Grave I); 33 (Grave VIII); 39, pl. xxvii.16 (Grave X); 43, pl. xxxii.2 (Grave XI); 49, pl. xl.10 (Grave XII). The grave associations are not always clear in the original publication, but according to

- Ardwidsson 1942 (n. 148), 33, in graves I and XII, the mail fragments were associated with helmets; in Graves X and XI, they were probably with helmets; and in Graves I and XI she felt that there were also mail shirts. Arrhenius (B. Arrhenius, 'The chronology of the Vendel graves', in J.P. Lamm and H-Å. Nordström (eds), *Vendel Period Studies*, Stockholm, 1983, abb. 6) proposed the following dates for the Swedish burials: Vendel I (600–630/40); Vendel X, XI, XII and XIV (560/70–600); Valsgärde 5, 6, 7 (600–670); Valsgärde 8 (560–600). A seriation study by Nørgård Jørgensen (n. 26), 140, abb. 120–21, suggested the following deposition dates: Vendel I and XII (600–630/40); Vendel XI and XIV (560/70–610/20); Vendel XII (600–630/40); Valsgärde 6, 7 (670/80); Valsgärde 8 (600–630).
- 150 Ardwidsson 1939 (n. 148), tafn I, 6, abb. 12; O. Cederlöf, 'The Sutton Hoo Ship-Burial and Armour during the Vendel Period', *Journal of the Arms and Armour Society* I/9 (1955), 153–64; L. Paroli (ed.), *La necropoli altomedievale di Castel Trosino, Bizantini e Longobardi nelle Marche*, Milan, 1995, 217–18, no. 168.
- 151 Planig: A. Wiczorek, P. Périn, K. von Welck and W. Menghin (eds), *Die Franken, Wegbereiter Europas 5. bis 8. Jahrhundert*, Mainz, 1996, 894–5; Gammertingen: I.W. Gröbbels, *Der Reihengräberfund von Gammertingen*, Munich, 1905, 2, 34–5, taf. VII. Paulsen's suggestion (n. 36), 130, that the extensive rusted iron remains at Nordendorf Grave 4 must have represented mail rather than lamellar armour must also be correct.
- 152 Böhner (n. 103), 472–507.
- 153 Wiczorek et al. (n. 151).
- 154 F. Stein, *Alamannische Siedlung und Kultur, Das Reihengräberfeld in Gammertingen*, Sigmaringen, 1991, 58.
- 155 In the *Strategikon*, however, the hood is not integral with the coat but a separate coif called a *skaplion*. In a later passage it is recommended that soldiers lacking mail (*zaba*) wear the hoods of others to deceive the enemy into thinking more men were armed (*Strategikon* X.1). For the term *zaba*, see below, ns 179–80.
- 156 The literature on this topic is extensive; early surveys appear in Paulsen (n. 36), 125–33 and J. Werner, *Adelsgräber von Niederstotzingen bei Ulm und von Bokchondong in Südkorea*, Munich, 1988, 13. Most recently see I. Bugarski, 'A Contribution to the Study of Lamellar Armours', *Starinar* LV (2005), 161–79, with particularly interesting finds from the Early Byzantine site at Svetinja at Viminacium in modern Serbia. To his bibliography may be added Mengarelli (n. 85), 289, fig. 180 (Tomb 119,29); the *lamellae* in the Crypta Balba workshops in Rome (Arena et al. (n. 63), 400–1, II.4.764–79); and G.V. Kubarev, 'Die Schutz Waffen mit figürlichen Lamellen als Indikator der Nomadenmigration in Eurasiens Steppenzone im 6.–8. Jh', in M. Mode and J. Tubach (eds), *Arms and Armour as Indicators of Cultural Transfer*, Wiesbaden, 2006, 453–84.
- 157 Pace G. Halsall, *Warfare and Society in the Barbarian West*, London, 2003, 168, who dismisses the passage as a reflection of the fact that Agathias was 'a prisoner of the traditions of Greek ethnography'. Cf. Cameron's (A. Cameron, *Agathias*, Oxford, 1970, 116–17, 20) more nuanced reading about Agathias' attitude towards non-Greek cultures and the political motivations behind his presentation of how (relatively) civilised the Christian Franks were (*Histories*, I.2). As Bachrach (B. S. Bachrach, *Merovingian Military Organization 481–751*, Minneapolis, 1972, 131–8) has demonstrated, Agathias' understanding of Frankish warfare was hardly perfect (at least in terms of cavalry), yet the fact that he was completely *au fait* with their unusual weapons, the *francisca* and the *angon*, suggests his sources on arms and armour may have been quite good.
- 158 Elsewhere Gregory simply uses the late Latin diminutive, *lurica*, in contexts which have different implications. Some are purely descriptive of metal armour, for instance deception by exchange of a *lurica* for gold coins in a chest (IV.46) or a near-drowning due to heavy armour worn by a former supporter of Gundovald (VI.38). One is royal, a reference to the breastplate worn by Clovis in his victory over Alaric II in the battle near Poitiers in 507 (II.37), and another refers specifically to a Lombardic warrior, using the trope of helmet and breastplate (X.3). A further reference reports the scandalous adoption of arms by two bishops who were brothers (IV.43). Finally, V.48 refers to the excessive arms and armour worn by Count Leudast of Tours, discussed further at pp. 104–5 above. On Gundovald, see Bachrach (n. 157), 54–5.
- 159 Isidorus (Orig. XVIII.viii.13): '*Lorica vocata eo quod loris caret; solis enim circulis ferreis contexta est*'. The translation above by S.A. Barney, W.J. Lewis, J.A. Beach, O. Berghof, *The Etymologies of Isidore of Seville*, Cambridge, 2006, 364.
- 160 F.L. Attenborough, *The Laws of the Earliest English Kings*, Cambridge, 1922, 55, 191. The law specifies that the *wergeld* for the life of a man is 100 shillings which the slayer, if necessary, can pay with a slave and/or a coat of mail and/or a sword. The text is not clear whether these alternative payments count individually or as a group.
- 161 *Strategikon* (n. 66), 12–14 (Book I.2–3), 106 (Book X.1), 114, (Book XI.1). On Persian mail: Ammianus Marcellinus (*Rerum XVI.10.8*) and A.D.H. Bivar, 'Cavalry Equipment and Tactics on the Euphrates Frontier', *DOP* 26 (1972), 273–91, at 275–9.
- 162 The *Notitia Dignitatum* at the end of the 4th century lists *loricaria* only in the western lists (at Mantua and Augustodunum [Autun]); the latter *fabrica* also produced *Klibanaria*, as did the eastern factories at Antiochia, Caesaria and Nicomedia. *Loricaria* could refer to either breastplates of unknown materials or mail; *klibanaria* referred to the metal armour appropriate to heavy cavalry troops, but it is not clear whether these always incorporated mail with the composite scale and lamellar armour.
- 163 Kišpek: R.Z. Betrosov, 'Kurgany gunnskogo vremeni u selenija Kišpek', *Archeologičeskie issledovanija na novostrojkah Kabardino-Balkarii v 1972–1979 gg*, Naltchik, 1987, vol. 3, 11–39. It has recently been argued that the lamellar helmet in the grave is Roman (M. Kazanski, 'Les tombes des chefs alano-sarmates au IV^e siècle dans les steppes pontiques', in Vallet and Kazanski (n. 23), 193). The mail was found above a wooden saddle and bridle in this large chamber grave under a mound. *Federovka*: I. Bóna, *Das Hunnenreich*, Stuttgart, 1991, 257, no. 46.
- 164 Ju. N. Voronov, O.K. Bgažba, N.K. Šenkao and V.A. Loginov, 'Raboty Cebel'dinskoi Ėkspedicii', *Polevye archeologičeskie issledovanija v 1981 godu*, Tbilisi, 1984, 74–7, pl. CIV.4. The Emperor Heraclius (r. 610–41) was of Armenian descent and his administration drew heavily on the peoples of the Caucasus – Lazi, Abasgians, Iberians – as well as on the Khazars: see P. Charanis, 'Ethnic changes in Byzantium', *DOP* 13 (1959), 25–44, at 32–4.
- 165 M. Gorelik, 'Arms and Armour in South-Eastern Europe in the Second Half of the First Millennium AD', in D. Nicolle (ed.), *A Companion to Medieval Arms and Armour*, Woodbridge, 2002, 127–48, XI–5.13 (Kazazovo, tumulus 106, Adygea, Krasnodar) and XI–5.11–12 (sections of mail from Verhnyi Chiryurt, tumulus 5). The Khazars in the region of northern Daghestan, the westernmost vassals of the Turks, consolidated their power around the middle of the 6th century and established alliances with the Alans in the northern Caucasus. It is possible that their mail, such as that preserved at Ćir-jurt in Daghestan, came from Persian sources (Cs. Bálint, *Die Archäologie der Steppe*, Vienna, 1989, 67, abb. 32.5).
- 166 J. Voronov, 'La civilisation matérielle de l'aristocratie apside (la côte est de la mer Noire) du IV^e au VI^e siècle', in Vallet and Kazanski (n. 23), 217–25, at 219–20.
- 167 Ardwidsson 1939 (n. 148), 34–6, argued that the Germanic Iron Age mail armour was imported but that the later Vendel period mail and lamellar armour might have been of domestic manufacture (*ibid.*, 44–6). The long mail shirt (98.5cm) fashioned with a hood and short sleeves at Gammertingen was made with riveted and solid rings in the same fashion as the Sutton Hoo Mound 1 shirt, and with rings of approximately the same size (0.85cm). These ring sizes are some 2–3mm larger than the best Iron Age shirts, but finer than some of the helmet mail (the Cologne prince's grave aventail rings were 1.5cm, those at Niederstotzingen 1.0cm).
- 168 Stolpe and Arne (n. 149), pl. xlii, fig. 1; Ardwidsson 1977 (n. 148), abb. 115, 120; see also Bruce-Mitford (n. 2), 214–20. The Valsgärde Grave 7 helmet remains the closest parallel for the Mound 1 helmet.
- 169 As, for instance, the mail shirt found on the body of the so-called Persian warrior in the siege mines at Dura-Europos (c. 256) (James (n. 141), III, 116, fig. 52).
- 170 F. Stenton (ed.), *The Bayeux Tapestry*, London, 1957, fig. 40; cf. also the split-legged mail suits shown at 21, 24, 46–7, 54–73. Unlike the Late Roman coats, these seem to have no front closures as they are shown being pulled off the slain warriors inside out in one piece (*ibid.*, figs 71–2).
- 171 Bruce-Mitford (n. 1), 465–9 and 445–50, figs 359–61; E. Crowfoot, 'The Textiles', in Bruce-Mitford (n. 40), 449–50, 457, 460, 462, fig.

- 319, SH13 (tape), wool twill (SH 1) and wool tabby weave tape (SH 23).
- 172 Ardewiddson 1939 (n. 148), 47.
- 173 T. Bateman, *Ten Years' Diggings in Celtic and Saxon Grave Hills*, London, 1861, 31–2. Perhaps he was familiar with 16th-century jacks made of small pieces of iron sewn in a lattice pattern within two layers of canvas.
- 174 A leather greave liner was found at Vindonissa (Bishop and Coulston [n. 140], 87); the mail at Castel Trosino survived as rectangular fragments backed by leather (Paroli [n. 150]).
- 175 Such as the *subarmalis* or *thoracomachus* referred to in the *De Rebus Bellicis* (J.P. Wild, 'Fourth-Century Underwear with Special Reference to the Thoracomachus', in M.W.C. Hassall (ed.), *De Rebus Bellicis*, BAR International Series 63, Oxford, 1979, 105–10). Archaeological evidence of these vital organic components is scanty, but a linen greave liner (or actual greave) fastened with leather ties was excavated at Dura-Europos (mid-3rd century) and the scaled horse armour from the site was also backed with linen and finished with leather (James [n. 141], 111, 128–32, nos 448–9; he assumes that they were 5mm thick). Mail coats from a Sarmatian site (late 1st–2nd century) in the middle Kuban also showed traces of leather or linen undergarments or backing (V.A. Goroncharovskii, 'Some Notes on Defensive Armament of the Bosphoran Cavalry', in Mode and Tubach [n. 156], 445–51, at 446, fig. 3.2) and a scale armour from a Severan fortress at Carpow (Perthshire) was backed by linen (J.P. Wild, 'A Find of Roman Scale Armour from Carpow', *Britannia* XII (1981), 305–6). Granger-Taylor has recently suggested that the thick weft-twined linen fragments found at the 1st-century site of Masada on the Dead Sea in association with burnt scales from armour might be identified as *pteryges* (H. Granger-Taylor, 'Military Textiles at Masada: fragments of linen armour and fragments of Roman legionary cloaks', *Clothing and Identities. New Perspectives on Textiles in the Roman Empire (DressID)*, Copenhagen, 18–20 May 2008, abstract of conference proceedings available on the net at <http://ctr.hum.ku.dk>).
- 176 Dennis (n. 66); F. Aussaresses, *L'armée byzantine à la fin de VI^{ème} siècle d'après le Strategicon de l'Empereur Maurice*, Bordeaux, 1909; G.T. Dennis and E. Gamillscheg, *Das Strategikon des Maurikios*, Vienna, 1981.
- 177 T.G. Kolias, *Byzantinische Waffen*, Byzantina Vindobonensia Bd XVII, Vienna, 1988, 51.
- 178 A. Jouttijärvi, 'The manufacture of chain-mail', in H. Lyngstrøm (ed.), *Early Iron, Netværk for Tidlig Jernteknologi 1*, Copenhagen, 1996, 53–60, at 53. See also the estimated weights of Roman period mail shirts in Alf's (n. 139), 79, ranging from 7.5 to 10.5 kgs.
- 179 T. Kolias, 'Ζάβα, Σαβρείον, Ζαβαρειώτης', *Jahrbuch der österreichischen Byzantinistik* 29 (1980), 27–35, at 29–30, suggests it found its way into the Byzantine lexicon in the Late Roman or Early Byzantine period along with κλιβάνιον (*klibanion*); Kolias (n. 177), 37–41. In the 10th century the term meant not just mail but also armour with plates or rows of iron rings for supplementary protection, presumably on a textile backing.
- 180 M. Parani, *Reconstructing the Reality of Images, Byzantine Material Culture and Religious Iconography (11th–15th Centuries)*, Leiden, 2003, 120–1, believes the term occurs first in the first half of the 13th century; in the early 14th century the term occurs on a list amongst 'armata'. *Zaba* may also be the etymology and origin of the protective garments (probably of textile alone), called the 'aba, kabâ, qabâ or kabadion in later Byzantine sources: cf. Kolias (n. 177), 54–7; T. Dawson, 'Kremasmata, kabadion, klibanion: some aspects of Middle Byzantine military equipment reconsidered', *Byzantine and Modern Greek Studies* xxii (1998), 38–50, at 39–42.
- 181 Dennis' translation (n. 66), 75–6, reads: 'If the ground is open and the air is clear, then the men should be trained not to wear their helmets but to carry them in their hands until very close to the enemy. If their shields are small, they should be carried on the chest to cover their mail coats, and their cloak should be thrown back over the shoulder pieces of the mail coat until the proper time... In this way, then, from a distance our army will not shine at all'.
- 182 This probably should not be confused with the term *skaplia* used in the text to mean a mail coif, although it often is, e.g. Kolias (n. 177), 43 and Bivar (n. 161), 291 (=aventail). The German translator of the *Strategikon* (Dennis and Gamillscheg [n. 176], 259) gives 'Schulterplatten' (shoulder plates). In his translation of the Emperor Leo VI's (r. 886–912) reprise of the *Strategikon*, Dain (A. Dain (ed.), *Leonis VI Sapientis Problemata*, Paris, 1935, index) translated *skaplidas* as 'petits boucliers portés sur les épaules', perhaps thinking of something like medieval spaulders. The *skaplidas* thus seem to be between the shoulder straps of a muscle cuirass (which were of course hinged at the shoulder blades) and the metal shoulder protectors shown in Middle Byzantine art.
- 183 See Kolias' comments (n. 177). In later Middle Byzantine texts the term refers to a waist-length shirt either of mail (*lorikion alysudoton*) or scale (*lorikion folidoton*) (cf. *Sylloge Tacticorum* 30.2, 31.1, 37, 38.7, 39.1). The 10th-century Book of Ceremonies (*De caerimoniis* of Constantine VII, 749–50) also refers to the *imation epilōrikon* (ἱμάτιον ἐπιλωρικόν), perhaps a richly decorated silk garment worn by the emperor over his mail.
- 184 Dennis (n. 66), 114, I believe correctly, translates *lorikion* as body armour and *zaba* as mail. Cf. Vegetius (*Epitoma rei militaris*, late 4th or first half of the 5th century), 2.16: 'lorica minores', an ancillary cuirass.
- 185 Bivar (n. 161), figs 6–7 (Ardashīr defeating the last Parthian king Ardashān V c. 226) and fig. 10 (Crown Prince Shāpūr), both at Frūzābād in Fars.
- 186 *Ibid.*, 278: 'During the European Middle Ages, at least from the early fourteenth century, both mail and breastplate were needed to give the wearer reasonable security... The representation of Ardashīr at Frūzābād shows beyond doubt that the elite cavalry of the Sasanians were already wearing both mail and a breastplate'.
- 187 Cf. Agathias, *Histories*, II.5, V.15; Procopius, *De Bello Persico* I.i.12–15 and *De Bello Gothico* V.xxiii.9–12. See also n. 144 above.
- 188 Gregory may have come across the term *thorax* either from his biblical readings: cf. *Ephesians* 6.14 ('...the breastplate of righteousness (θώρακα τῆς δικαιοσύνης)', echoed in *Vita Gangulfi Martyris Varenensis* 3.5–10: *iusticiae torax inexpugnabilis*), or classical Roman sources: Livy, *Ab Urba Condita*, 42.61.2 (...*loricae thoracesque*).
- 189 Cameron (n. 16), 38, 53–6; knife sheaths in Mound 1 at Sutton Hoo were twice as thick (2.5–3mm) as ordinary examples. The leather sheaths and scabbards preserved in later Anglo-Scandinavian contexts at York were remarkably similar in thickness, ranging from 1 to 2mm but most averaging 1.5, suggesting great continuity in this conservative craft (Cameron in Q. Mould, I. Carlisle and E. Cameron, *Craft, Industry and Everyday Life: Leather and Leatherworking in Anglo-Scandinavian and Medieval York*, York, 2004, 3494–3500; a few thicker straps, up to 3mm–5mm, were found (*ibid.*, 3500–3504).
- 190 Richardson in Beaby and Richardson (n. 140), fig. 7.
- 191 As recreated by the English National Trust at the Sutton Hoo site.
- 192 Two large torso-sized panels of leather found at Vindonissa may have been some sort of collared 'gambeson' (the later medieval term for a padded jacket, often worn with mail or plate armour) (Gansser-Burckhardt (n. 139), 37–43).
- 193 Horn or bone lamellar could be suspended by straps or thongs over the shoulders (cf. B. Thordemann, *Armour from the Battle of Visby*, Stockholm, 1934, figs 239–41, 252, 254), similar to the N. Zhou and Sui Dynasty leather (or lacquer) defensive plates: A. Koch, 'Frühmittelalterlich Blankwaffen im Spiegel chinesischer Bildendenkmäler des 5.–10. Jahrhunderts n. Chr', in Mode and Tubach (n. 156), 143–229, at 146–9, abb. 13, 16–17. James (n. 141), 112–13, notes that, despite the excellent evidence at Dura, a reconstruction of a complete lamellar shirt remains impossible, so that the structure of the critical shoulder and arm areas remains unknown, as does the presence or absence of sleeves. Surviving Inner Asian suits of leather lamellae are fashioned as long open coats with separate cape-like sections over the arms and so would not require shoulder fastenings.
- 194 The only functional piece of leather 'armour' from this period known to this author was found in a later Anglo-Scandinavian context in York; this was an archer's brace cut down from a shoe which was 3.2mm thick (Cameron (n. 189), 3504).
- 195 Robinson (n. 140). A. Williams, *The Knight and the Blast Furnace, A History of the Metallurgy of Armour in the Middle Ages and Early Modern Period*, Leiden and Boston, 2003, 943–4. A cuir-bouilli poleyn (knee guard) of about 5mm thickness was defeated by a blade at 90J and a lance at 30J (joules = units of energy expressing the kinetic energy of missiles). Other specimens of hardened leather armour of 5mm thickness were defeated at 50J (blade) and 20J (lance); buff (oiled) leather was defeated at 70J (blade) and

- 30J (arrowhead). In comparison, horn was defeated at 120J by the blade and 50J by the arrowhead. Linen padding alone (at 80J by the blade and 50J by the lance) was actually more effective than leather. Fifteenth-century mail was defeated at by the blade at 170J, by the lance at 140J and by the arrow at 120J. For further linen results see below at n. 207. I am grateful to Paul Mortimer for this reference. The relative inefficiency of *cuir bouilli* as actual armour may explain why surviving Late Medieval and Renaissance examples are often confined to parade shields, helmets or helmet crests (cf. G. Gall, *Leder im europäischen Kunsthandwerk*, Braunschweig, 1965, 123–35, abb. 10, 123–35, also abb. 100 (chamfron) and abb. 99 (a crupper/tail defence). The great majority of moulded *cuir bouilli* objects are decorative chests, containers, sheaths, bottles, etc. and the late 14th century references to *cuir bouilli* armour refer to either flat breast plates or to moulded limb and joint protectors (sources summarised in Cameron (n. 16), 26–7).
- 196 Homer (*Iliad* II.529); Xenophon (*Anabasis* IV.vii); Nepos (100–24 BC) in *Excellentium Imperatorum Vitae*, XI.1.4, writing of Iphicrates of Athens (early 4th century BC) notes: 'He likewise changed the character of their cuirasses, and gave them linen ones instead of those of chain-mail and brass; a change by which he rendered the soldiers more active; for, diminishing the weight, he provided what would equally protect the body, and be light'.
- 197 Cf. Dio Cassius' (*Historia Romana* LXXVIII.7.2) reference to the Emperor Antoninus' (in 212) fascination with early armour and the recreation of a Greek-style three-ply linen breastplate (θώραξ λινόυς τρίμιτος).
- 198 Kolias (n. 177), 57–8.
- 199 Mosaic: F. Deichmann, *Ravenna. Hauptstadt des spätantiken Abendlandes, Band III: Frühchristliche Bauten und Mosaiken von Ravenna*, Wiesbaden, 1969, Band III, tafn 216–7. *Wall paintings* (of 7th–8th century date in Egypt): M. Rassart-Debergh, 'Quelques saints militaires dans la peinture copte et leurs antécédents', in Vallet and Kazanski (n. 47), pl. II, figs 2–3 (Qoucoûr el-Izelia 14 at Kellia); pl. II, fig. 4 and pl. III, fig. 1 (Baouit, c. 800). See also O. Grabar, 'The Paintings', in R.W. Hamilton, *Khirbat al Mafjar, An Arabian Mansion in the Jordan Valley*, Oxford, 1959, room E12, eastern wing of the palace, pl. xcviia (not described in the text). It is unlikely at this date that the depiction is of Roman-style metal lamellar, as described by I.P. Stephenson, *Romano-Byzantine Infantry Equipment*, Tempus, 2005, fig. 52.
- 200 Cf. K. Weitzmann, *The Joshua Roll*, Princeton, 1948, figs 45–7.
- 201 Cf. Parani (n. 180), pl. 144; Thordemann (n. 193), fig. 293 (Greek Octateuch from Smyrna, 12th–13th century).
- 202 M.V. Ščepkina, *Miniatiury Khudokoy psaltyri*, Moscow, 1977, nos 26, 45, 58, 60, 67, 148. In some cases separate mail hoods and/or neck protectors are shown, resembling those described in the *Strategikon* (I,2, 20) as a περιτραχήλιον (usually translated as a gorget). This was a particular form of neck protection worn by the Avars constructed of strips of linen on the outside with wool on the inside.
- 203 J.F. Haldon, *Constantine Porphyrogenitus, Three Treatises on Imperial Military Expeditions*, Vienna, 1990, 277.
- 204 N. Franken, *Aequipondia. Figürliche Laufgewichte römischer und frühbyzantinischer Schnellwaagen*, Alfter, 1994, 181–87, CB1, CB8, CB21, CB26, CB31. I am grateful to Chris Entwistle for drawing my attention to these.
- 205 Bastien (n. 137), 341–65.
- 206 M. Schmauder, 'Die Onyxfibel aus Szilágysomlyó und die Gruppe der sogenannten Kaiserfibeln', in W. Seipel (ed.), *Barbaren-schmuck und Römergold, Der Schatz von Szilágysomlyó*, Vienna, 1999, 120–37, at 125–6, abb. 7. These are not dissimilar to Hellenistic Greek attachment loops, see n. 73.
- 207 Williams (n. 195), 934–5. It took 200J of energy with a blade to defeat a heavy quilted linen 'jack' (consisting of 26 layers of 171g weight linen). But only 5 layers of linen could also fend off a sword blade at 100J, i.e. more effectively than the 80 or 90J required to defeat the leather. Lightweight linen remains today the most desirable material for fencing armour, effective against puncturing at only a few layers.
- 208 Bruce-Mitford (n. 1), 445–51, 458–65.
- 209 Linen tabbies account for a quarter of the surviving Anglo-Saxon textiles in Anglian and north Saxon areas, rising to a third of the textiles in south-west Saxon territories and literally half the textiles in Kent: L. Bender Jørgensen, 'The textiles of the Saxons, Anglo-Saxons and Franks', *Studien zur Sachsenforschung* 7 (1991), 11–23, at 13, fig. 2; Owen-Crocker (n. 68), 133–4, 171, 292–3. The former has argued this reflects an affinity with Frankish as opposed to Scandinavian textile traditions.
- 210 Bender Jørgensen's studies (*ibid.*, fig. 2) indicate that wool textiles (at 36.3%) were more prevalent in East Anglia than linen (26.6%).
- 211 An experiment by the author conducted with replica clasps attached to tightly woven woollen fabric showed this to be wholly feasible. The movement could have been effected by collapse of the body (if lying on its side or seated), by human means, i.e. folding a garment alongside a body, or by disturbance within the grave (collapse of a bier or subsequent animal disturbance).
- 212 Kolias (n. 177), 118–21; Dawson (n. 180); Parani (n. 180), 107, n. 25 and 112–14.
- 213 P. Post, 'Ein Panzerfragment aus der Frühzeit der Brigantine', *Zeitschrift für Historische Waffen- und Kostümkunde*, n.f. 8/9 (1943), 225–39, abb. 7.
- 214 Cassius Dio's (*Historia Romana*, LXXIX.3.2) remarks concerning Caracalla are of interest here: 'He could no longer bear great heat or the weight of armour, and therefore wore sleeved tunics fashioned more or less like a breastplate (θώρακος), so that, by creating the impression of armour without its weight, he could be safe from plots and at the same time rouse admiration. Indeed, he often wore this dress when not in battle'.
- 215 C. Brady, 'The Weapons in Beowulf', *Anglo-Saxon England* 8 (1979), 79–142, at 110–21. It is also intriguing that the Anglo-Saxon term *searo* (another word for a mail byrnie) in the plural meant arms; the Byzantine term *zaba* evolved into the term for collective arms and, eventually, the royal armoury (Kolias, n. 179).
- 216 U. von Freeden, 'Das Ende engzelligen Cloisonnés und die Eroberung Südarabiens durch die Sasaniden', *Germania* 78/1 (2000), 97–124.
- 217 N. Adams, 'Reading the Sutton Hoo Purse Lid', *Saxon* 41 (2004), 1–3; Adams, 'The Sutton Hoo Purse Lid', forthcoming. The closest stylistic parallel, for example, for the wolf figures on the purse lid appear on a buckle found in a Germanic female grave at Kölked-Feketekapu B in a Lombardic region of Hungary (Grave 85). The shield-on-tongue buckle type was in production from the mid-6th century and the grave contains other late 6th-century material (Kiss (n. 54), 29–37, 293–7, abb. 130).
- 218 E.g. in *Frisia*: the 6th-century belt mount and sword buckle from Rijsnberg in a male grave dated 630–40 (Webster and Brown (n. 5), 190, no. 36) and the 6th-century disc on bow brooch with *cloisonné* comparable to that at Sutton Hoo found at Wijnaldum in a terp mound c. 630 (*ibid.*, 188, no. 20); in *England*: the Wilton cross mounted with a *solidus* of Heraclius (Webster and Backhouse (n. 43), 27–8, no. 12).
- 219 M. Ryan in S. Youngs (ed.), 'The Work of Angels', *Masterpieces of Celtic Metalwork, 6th–9th centuries AD*, London, 1989, 58–9. The piece also incorporates *millefiori* inlays and imitation *cloisonné* studs.
- 220 F. Glaser, 'Gräberfeld der Ostgotenzeit (493–536) in Iuenna/Globasnitz', *Fundberichte aus Österreich* 41 (2002), 431–8, at 434–5, tafn 3, 5.
- 221 Bruce-Mitford (n. 2), 220–25; Böhner (n. 147), 533–49. Recently a officer's helmet with crest, ear and neck flaps has been excavated at a Late Roman/Early Byzantine fort on the *limes* in northern Bulgaria; this dates to the first quarter of the 5th century (G. Gomolka-Fuchs, 'Zur Militärbesatzung im spätromischen Limeskastell Iatrus von 4. bis zum zweiten viertel des 5. Jahrhunderts', *Eurasia Antiqua* 5 (1999), 509–22, at 514–5, abb. 4).
- 222 Evans in Webster and Backhouse (n. 43), 29.
- 223 M. Whitby, *The Emperor Maurice and his Historian: Theophylact Simocatta on Persian and Balkan Warfare*, Oxford, 1988, 147; one famous personality was Drocult, a Lombard duke, Swabian by birth, whom Theophylact and Paul the Deacon record as fighting for the Byzantines against the Avars in the Balkans in 587, presumably together with other Germanic mercenaries.
- 224 Bruce-Mitford (n. 2), 91–9, 205–20.
- 225 The grave has not been fully published, but it contained undecorated Latin crosses in sheet gold, an eastern Mediterranean jug and a folding military camp stool which find parallels in this milieu (S. Hirst, *The Prittlewell Prince, The discovery of a rich Anglo-Saxon burial in Essex*, London, 2004, 10, 30 and 32; L. Blackmore, 'Schätze eines angelsächsischen Königs von Essex, Die Funde aus einem Prunkgrab con Prittelwell und ihr Kontext',

- Zwischen Spätantike und Frühmittelalter*, RGA-E 57, Berlin, 2008, 323–40, abb. 6, 11). *Crosses*: Menis (n. 147), 404, no. X–70 (Cividale); Mengarelli (n. 85), Castel Trosino Tomb 119; Pasqui and Paribeni (n. 85), 172–6, figs 21–22. *Byzantine jug*: Paulsen (n. 36), 28–9, tafn 5, 29 (Niederstotzingen grave 9). *Stool*: A. Kiss, *Das frühawarenzeitliche gepidische Gräberfeld von Kölked-Feketekapu A*, Studien zur Archäologie der Awaren 5, Innsbruck, 1996, 42–5, taf. 36 and Kiss (n. 54), 56–60, 334, abb. 17–22. Oexle (J. Oexle, *Studien zu merowingerzeitlichem Pferdegeschirr am Beispiel der Trensen*, Monographien RGZM, Mainz, 1992, 102) suggested that the men buried at Niederstotzingen had participated in the Lombardic campaigns in northern Italy.
- 226 The *Notitia Dignitatum* illustrates arms and armour as insignia of the *magister officiorum*; buckles appear under the insignia of the *comes sacrarum largitionum* and *comes rerum privatarum* (O. Seeck, *Notitia Dignitatum*, Berlin, 1876, Or. XIII, Or. XIV, Oc. IX, Oc. XI, Oc. XII). The *barbaricarii* and *argentarii* in the imperial workshops mentioned in the *Codex Theodosianus* decorated parade armour with gold and silver and also produced textiles ornamented with precious metals and gems; they were answerable to the *comes sacrarum largitionum*, presumably because their work involved precious materials that needed to be controlled. The classic sources on imperial donatives remain J.P.C. Kent in Dodd (n. 145), 35–45 and R. MacMullen, ‘The Emperor’s Largesses’, *Latomus* 21 (1962), 159–66; see also clarifications in W.G. Sinnigen, ‘*Barbaricarii*, *Barbari*, and the *Notitia Dignitatum*’, *Latomus* 22 (1963), 806–15.
- 227 I. Baldini Lippolis, *L’Oreficeria nell’impero di Costantinopoli tra IV e VII secolo*, Bari, 1999, 52–66, with older literature.
- 228 Aussaresses (n. 176), 13–16; J.F. Haldon, *Byzantine Praetorians*, Ποικιλὰ, Byzantina 3, Bonn, 1984, 95–102, 129–30. The palatine regiments included the emperor’s bodyguards, *scholares*, their successors, the *excubitores*, as well as the *protectores domestici*.
- 229 Haldon (n. 228), 319–20.
- 230 Aussaresses (n. 176), 14–15.
- 231 A. Greifenhagen, *Schmuckarbeiten in Edelmetall, Band II Einzelstücke*, Staatliche Museen Berlin, Preussischer Kulturbesitz, Antikenabteilung, Berlin, 1975, Bd. II, 101–2, tafn. 69–70. These were composite constructions with *repoussé* silver reliefs of frontal heads attached to a thin copper-alloy base fitted with small loops; they were found at Rittergut Lauersforter (Nordrhein-Westfalen) and can be dated to the 1st or 2nd century.
- 232 G. Webster, *The Roman Imperial Army of the First and Second Centuries AD*, Norman, Oklahoma, 1998, 132. One proposed reconstruction of the Lauersforter set inserts each loop through a piercing on a leather strap; each loop was then held in place by a twist of metal (V.A. Maxwell, *The Military Decorations of the Roman Army*, London, 1981, 54, 94–5, fig. 12). No metal twists survived and the loops are very small so it is possible that the fastenings were splints of organic material as reviewed above, p. 93, and that the straps were made of textile.
- 233 ‘...inhient iacentis splendori, quos non contigerit videre pignantem’, translated by T. Hodgkin, *Italy and Her Invaders*, 476–535, vol. III, Oxford, 1896, 194.

Byzantines, Goths and Lombards in Italy: Jewellery, Dress and Cultural Interactions

Neil Christie

Introduction

This is not a paper that will analyse in detail the design, inspiration, cultural affinities and production or manufacturing techniques of specific jewellery or craft items; nor is it one that identifies how jewellery or dress items were carried, worn or displayed and how such forms and fashions evolved. Instead it seeks to place objects into a cultural and socio-political-economic context and to highlight the ways we might look at or interpret their presence, movements and functions; it will question the cultural labels we apply to these and at the same time assess the fluidity of these and highlight the contacts, sharings and borrowings between peoples through objects. The study area is a highly pertinent one, since Italy between the 6th and 8th centuries was, for much of the time, a divided and confused set of regions, territories, provinces, principalities, duchies and kingdoms, split between Byzantines (East Romans and Italians) and Lombards, and internally split between powers such as archbishops, exarchs, dukes, gastalds and counts; and before the Byzantine-Lombard split, Italy saw Ostrogothic rule and then Byzantine invasion and extended military upheaval. The temptation is naturally to seek differences or contrasts from one power to another, to reinforce the conflict and tension identified in contemporary historians – e.g. Byzantine/imperial coinages against imitations and local and royal Lombard issues; diverse religious beliefs and leanings (Catholic versus Arian Christianity; residual paganisms); diverse languages and laws; different fighting styles and socio-military systems; and distinctive dress – with Lombards distinctive also through furnished burial rituals and with males often associated in death with weaponry. It is easier if the archaeology and material culture fit this image of ethnic belonging, but, as will be seen, the divisions are often blurred and the tendency – sometimes a little forced – is now to seek out the borrowing or sharing between groups, peoples and powers.

Thus this paper will first outline the main historical events and impacts and then trace something of the range and types of dress artefacts and other materials that survive for the imperial or Byzantine territories, particularly in the territory of the capital, Ravenna. Much more visible – or rather better preserved and recovered archaeologically – are finds from Lombard contexts, chiefly burials. These provide a fuller image of dress styles and their evolution, but also enable discussion of the ways in which these differed or converged with materials and styles in non-Lombard occupied territories. The excavated evidence of bulk manufacturing in 7th-century Rome then provides a platform for debating contacts and trade between Romans/Byzantines and Lombards and the level of ‘differentness’. The data utilised here will focus mainly on northern and central Italy, including Sardinia; the paper by Isabella Baldini Lippolis (this volume) analyses in more

knowledgeable depth the evidence for Byzantine-period jewellery and fittings in southern Italy and Sicily.

Historical context

Key to understanding the debate and problems is a broad understanding of the historical context of 6th- and 7th-century Italy, to highlight the period as one generally of social, political, military and economic change and upheaval, albeit with zones and phases of stability and security. Whilst fairly well deciphered nowadays historically, there is nonetheless a tendency to overemphasise the military disruptions and, in so doing, to expect that the archaeology also reflects divisions between powers and peoples.¹

In the case of the Ostrogothic Kingdom in Italy (493–533), however, we see a mix of images. The kingdom was created under King Theoderic after he and his followers were dispatched by the eastern emperor to the West, to wrest control of the Italian province, held independently since 476 by the *generalissimo*-King Odoacer. After a period of conflict and uneasy alliance, Theoderic installed himself as sole ruler at the court of Ravenna. The king then established a stable and prosperous kingdom, and promoted a coherent working relationship between his soldiery and nobility and the extant, substantial native Italo-Roman population; letters and documents issued in both Rome and Ravenna indicate an active administration, dealing with internal and external matters, pursuing trade and religious links; marriage alliances with Germanic neighbours in Gaul, Spain and north Africa helped further secure the kingdom, whose vitality is illustrated well in the high level of trade maintained with Africa and the East.² Relations with the east Roman court weakened from the 520s and eventually culminated in a Byzantine assault against this and other Germanic powers (Vandals, Visigoths) in a search to regain mastery of the Mediterranean.

Although the fine mosaics of the Emperor Justinian and his empress in San Vitale at Ravenna signify the new authority in the 540s (Pl. 2), these gloss over ongoing military, political and religious vicissitudes in the rest of the peninsula, where sieges, raids, and food shortages ensured an ongoing insecurity through into the early 550s. (The narratives of contemporary Byzantine historians, Procopius and Agathias, are more than eloquent.) While southern Italy avoided serious damage, northern and central Italy did not, and tensions between soldiers and civilians, Goth and Roman, will have been high; unsurprisingly, the military remain dominant even after Byzantine control was secured. Although imperial input is evident in Ravenna and Classe with new churches, heightened mint activity, and a fuller flow of eastern goods (plus a flow of eastern administrators, clerics, monks, and traders), overall few of Italy’s other cities saw little beyond basic restoration.³

Although fair stability existed for well over a decade, any

renewal plans for the rest of the Byzantine towns and territories in Italy (as indeed in Spain) were cut down in the wake of an invasion in 568 by the Lombards, moving *en masse* (with modern estimates of between 40–70,000 – one that is matched in many a ‘barbarian’ occupation force, including the Ostrogoths in Italy and the Vandals in Africa) from Pannonia. As former allies, with many a soldier and chief having served in the imperial ranks, including in the Byzantine-Gothic wars in the peninsula, the Lombards had a fair awareness of Byzantine military strength and numbers (or relative lack of) in Italy.

After establishing a first duchy in Friuli, dukedoms were created in a set of strategic towns in the north and progressing into the central territories – sites like Verona, Milan, Brescia, Como, Turin, Perugia and Spoleto, many of which had gained strong fortresses in the earlier conflicts (in the 5th as well as the 6th century). Liaison between Lombard dukes was variable, and royal control was initially weak, leading to an *interregnum*, which the Byzantine authorities tried to exploit, but struggled in part due to the scattered warfare that ensued, with different ducal forces securing lands and forts in diverse areas. Byzantium resorted to tried and tested methods such as bribes, tribute, buying over of Lombards (many of whom did fight loyally for the imperial side, although others switched back depending on where more fortune lay), but also paying for a Frankish alliance and incursion – this too backfiring and leaving the stretched Byzantine forces (further stretched as the eastern Roman forces had other military distractions along the lower Danube) on the defensive. New, strong Lombard rulers from the mid-580s saw treaties drawn which recognised a divided Italy, with Byzantines pushed increasingly towards coastal zones. Military commanders on both sides remained active and prominent but many regions needed to look to their own resources to secure themselves.⁴

In the course of the 7th century there was general stability but with phases of renewed Lombard aggression, notably in the north (conquest of Liguria in the 640s, gains in the Veneto in the 660s); growing economic strength is evident, marked from the 680s by many religious foundations (and an official Lombard conversion to Catholic Christianity). Lombard kings held variable control over the southern dukedoms of Spoleto and Benevento. In a similar vein we see an occasionally problematic articulation of imperial/Byzantine power in Italy: whilst strong in the south and in the territory of Ravenna in the north-east, Rome’s Pope gained increasing authority from c. 600; imperial interventions (by emperors like Constans, stripping churches for the war effort in the 660s, or by governors who even in the 8th century intervened forcefully in papal elections, or *via* legislation on key religious issues such as icons) often created more tension and distrust – arguably relegating the Lombards to less of a worry. The weakening imperial position enabled further Lombard expansions in the 720s, eventually gaining Ravenna, and prompting the popes to look for Frankish succour.⁵

In sum, the 6th century is a disturbed, destructive period, with disrupted control and with the military prominent: in a divided peninsula featuring fractured communications and a broken internal economy, new authorities emerged within regions and perhaps even within communities. Differences between sides and powers were most probably heightened, fostering creation or exhibition of specific identities. This is

when, in the decades either side of 600, Pope Gregory the Great is variously treating with generals, bishops, untrustworthy Franks, the Byzantine emperor but also with the Lombard royalty – his efforts to encourage peace with the king, as well as to get him to convert, using the Catholic Queen Theodelinda as a go-between (aided by many rich gifts, books, crosses, relics but also trinkets), were to counter the destructive divisions potentially being deepened. (The gifts and negotiations are well documented in Gregory’s own letters and also in many of the extant gifts now in the Monza Cathedral Treasury.) His efforts drew more anger from the emperor and his military representative in Italy. In other letters – not sent to the enemy of course – the Lombards are recorded as ‘an unspeakable race’, showing the pain with which Gregory regarded treating with them, but someone had to do it to help his battered world and flock.⁶ These gifts from the pope were a mix of Roman and Constantinopolitan manufacture, but were precious and in recognition of the Lombard king installed at Milan as a figure of lasting power. Indeed, by installing himself in a former imperial capital and gathering around him imperial garb and courtiers as well as rituals (depicted thus on the so-called Helmet of Agilulf), the king no doubt viewed himself as an equal. In this context mention can also be made of the appearance of distinctive Lombard seal-rings, generally with images and names of the bearer, and associated with high-ranking military commanders and dukes; these are presumed to denote royal badges of office, and may be an instance of royalty securing bonds (the seals also indicating movement of official correspondence). For example, the seal-ring of Aufret from Civita di Bagnoregio may have belonged to the Lombard commander (but then in Byzantine pay), Ansfrid, who communicated with Pope Gregory in 600.⁷

In contrast to the 6th century, the relative stability of the 7th century in territories, powers and society will presumably have lessened the differences as dialogues improved (albeit with periods of renewed tension); laws, history-writing, monastery building, and pilgrim movement all reflect a more settled and communicative Italy. Potentially, therefore, the observation of the material cultures of these centuries – jewellery, dress items and accessories being key (rarely will ceramics be explicit markers) – offers scope to test these perceived changes and to observe levels of display of distinctive identities.⁸ As noted in the Introduction, other routes exist to flag differences between ‘sides’, notably in terms of language, law and belief, and these too evolved at a pace – much like the contrast between a Victorian gentleman and a 1970s punk in England, a mid-7th-century Lombard in north Italy will have talked, thought, and interacted in a quite different way from a mid-6th-century Lombard on the Danube. Analysis of these equally vital forms of identity is not the target here as they have been proven elsewhere to show much fluidity, particularly in stable political and economic climates.⁹

Materials and identities

Ostrogoths

First we can return to the Ostrogothic rule in Italy, which was, for the most part, peaceful and stable. Important evidence comes from excavations at Classe, the port city of Ravenna, revealing busy workshops, depots, mercantile exchange and



Plate 1 Early 6th-century Gothic belt plaque (4 x 4 cm) of twinned beaked-head design, made of gilded bronze, with glass paste settings, recovered in the 1974 excavations at Building 1, podere Chiavichetta, Classe

kilns, and at Ravenna itself, where there are numerous building works, especially churches, but also private houses and renewal of urban services such as water and drainage systems. Without the documentation the archaeology alone would suggest that this was still a 'Roman' city. Indeed, the standing archaeology, comprising a series of churches with their stunning architecture and art, show a continued sharing of design and styles with Roman and eastern Roman ('Byzantine') worlds: Theoderic in fact sought both materials (marble, mosaic) and craftsmen from Rome and from Constantinople in particular to fulfil his programme of urban regeneration and embellishment. There are differences, however: the Gothic churches were Arian in dedication and a specific set of edifices (cathedral, baptistery, plus additional churches and monasteries) were established for relevant groups of the Germanic population; these did not, of course, replace existing Catholic complexes which still served the bulk of the inhabitants (and visiting dignitaries, merchants, clerics and tourists). The Arian churches were not physically distinguishable from the Catholic ones, but their services and staff and some of their art were different, and when the Byzantines gained control of Ravenna in the 540s, churches were reconsecrated, relics and items removed, and some artwork either cancelled out or modified (as best witnessed in the reworkings of the Palatium mosaic in Sant'Apollinare Nuovo). The claim for a 'Gothic quarter' in the north-east of the city cannot easily be traced archaeologically as the houses and material culture have no distinctive 'Gothic' character; the claim lies mainly with the presence of Theoderic's mausoleum and contemporary tombs in the spaces beyond the north-eastern circuit wall and a number of (mainly lost) Gothic-period churches within the circuit.¹⁰ Materially, very few objects of Ostrogothic design, namely eagle brooches or *cloisonné* buckles (Pl. 1) or earrings, have been recovered in or around the city or in the well-excavated deposits at Classe – such objects may have been paraded at court and in town, but were not discarded in any quantity for archaeologists to recover.¹¹

Some contemporary dress styles can arguably be viewed in the imagined processions and biblical scenes in Sant'Apollinare Nuovo in particular, though of course the main secular depictions of king and court were almost all removed in the Byzantine takeover and rededications and so we lack any

helpful displays of eagle brooches and *cloisonné* jewellery.¹² Ostrogothic Italy lacks the high number of cemeteries and furnished tombs recovered in Visigothic Spain; indeed, furnished burial – inhumations with dress fittings, possessions or gifts – is largely limited in Italy to high status females. Theoderic as king requested that materials not be placed in tombs, perhaps as an additional route to attempting to narrow the differences between Goths and Romans. Why not all noble females followed this directive is unclear, unless these burials related to an older generation who desired 'traditional' burial – but of course we do not know how many 'Gothic' women reached Italy and some of the deceased may have been native Italians married into the new ruling elite.¹³

Byzantines

Whilst the tradition of burial without grave items or gifts was prevalent in imperial Byzantine zones, as had been the case from the 4th century, often this did not exclude dress items relating to outfits worn in death or other items such as knives and combs. In certain territories different expressions prevailed, some relating to older, regional traditions – combs and knives, for example, are more regular finds from tombs in north Italy, whereas in the south and in Sicily ceramic vessels appear the more usual components.¹⁴ Thus we can next draw on some excavated burial data along with materials recovered from hoards, other archaeological contexts, or from casual discoveries from ploughing or building work to consider Byzantine dress and identity.

We may begin with the Exarchate, equating to Emilia-Romagna, with tombs and materials of 5th–7th-century date recently catalogued and re-assessed by Cavallari.¹⁵ For the Late Roman and Ostrogothic period (5th to early 6th century), burial finds (these generally found in more rural contexts) comprise predominantly ceramic items and jewellery, but with limited dress items. In the Byzantine period, from the mid-6th to mid-7th century, Cavallari observes how personal objects feature more prominently, with combs a particular component, followed then by jewellery and dress items (such as zoomorphic brooches, earrings); rarely are there weapons or vessels in tombs, although one 7th-century tomb at Sarzana near Rimini had a long knife, five arrowheads and a belt buckle and fittings. There appears to be a shift in location of tombs and cemeteries to towns and forts, perhaps in recognition of the wider insecurity. On the western fringes and then, from the 7th century, within former imperial territory as Lombard gains were made, Lombard cemeteries with weapons accompanying male burials appear normally as units distinct from Roman burial grounds. A key site for Late Roman-Gothic period burials and Lombard tombs is Imola-Villa Clelia.¹⁶ Cavallari also suggests that it is in centres closer to the court at Ravenna that wealthier or more showy burials occur, although this normally applies more to female burials.¹⁷

In Ravenna itself the picture is fairly limited, but Byzantine period and Early Medieval tombs are known from a number of intramural and extramural locations (in some cases in groups, and occasionally cutting into abandoned buildings), of variable form, but often in stone coffins or built tombs, many unfurnished, but some with bone combs and/or simple bronze bracelets; Gothic-period burials have been uncovered in the area of via Darsena and Theoderic's mausoleum.¹⁸ Few burials



Plate 2 San Vitale, Ravenna: panel depicting the Emperor Justinian, the Bishop of Ravenna, other clergy, court officials and soldiers, highlighting dress, fittings, footwear, hairstyles

of Byzantine date are yet known from the Classe zone, but excavations at the port and canal warehouses have recovered some dress fittings of Gothic to Byzantine date, including the foot of a stirrup brooch, and varied belt buckle types – ring, lyre, perforated and cruciform (Pls 3–5) – suggestive of items shipped into the court's port city from the East but also from regional workshops such as in Sicily.¹⁹

There is therefore little direct comparison from the ground with the stunning imagery of the mosaics of San Vitale of Ravenna, depicting the Emperor Justinian and the Empress Theodora (Pl. 2): here colours and jewels express visually the wealth of the Byzantine imperial court and in so doing indicate the formal dress of the state authorities, as well as that of bishops, high elites and even soldiery and household officials – cloaks, tunics, vestments, dresses, shawls, trousers, footwear, buckles and belts, brooches, earrings, rings and hairstyles are all displayed. The powerful panels do not recreate posed scenes at Ravenna itself, since neither Justinian nor Theodora made it to Italy, though the Ravennate bishop is depicted, along with, potentially, some of the emperor's victorious generals in Italy, such as Narses.²⁰ Clearly the elite will have emulated as far as possible the designs and fashions advertised by the court, but whilst glimpses of this come from other mosaics, illustrations and texts, only hints of this come from the buried archaeology (although, as we shall see, the Lombard elite burials give some sign of the display mechanisms available).

Down the eastern Adriatic coast, the archaeology of Late Antique and Byzantine Abruzzo has been much enhanced through urban and landscape study by the regional Soprintendenza and particularly through the excavations at Crecchio.²¹ The former work has helped identify Late Roman through to Early Medieval imprints and changes, with valuable conclusions drawn from place names, burials, rural sites and forts on a contested frontier between 580 and 610 as Lombard forces pushed towards the coast from the west; as elsewhere in Italy, Lombard settlers took over many of the existing sites and merged with residual local populations. Crecchio, meanwhile, relates to a Byzantine fort imposed over a former villa (at the locality of Vassarella) and fortunately features dumps of contemporary materials, notably in a cistern: analysis of this deposit has been exceptionally valuable in identifying how this part of eastern coastal Italy was well served by trade from the east Mediterranean, Egypt as well as north-east Italy. The so-called Crecchio ware, with painted decoration, is thought to derive from Egypt, and was then imitated in urban potteries locally; it is argued that either Egyptian regiments were posted to the zone or the Byzantine Abruzzo ports enjoyed favoured trade connections with Egyptian merchants.²² Contemporary burials (e.g. at Penne, Moscufo, Tratturo di Vasto) in the slowly shrinking Byzantine territories often contain at least one such Crecchio jug, but rarely feature much in the way of dress items or jewellery; however, the Crecchio excavations did recover



Plate 3 Seventh-century bronze openwork buckle-plate, front and back (4.5cm long), from Classe



Plate 4 Presumed mould for a belt plate of lyre-shape (5.6cm long), featuring a smiling lion and, to its rear, a circle enclosing a Greek monogram; excavated in 1978 in Building 3 at Classe and dated to the 6th–7th century



Plate 5 Seventh-century Byzantine openwork buckle (4.9cm long) from Olbia, London, British Museum (PE 1923,7-16,81)

examples of ring- or kidney-shaped belt buckles, and a few zoomorphic brooches and arm bracelets with serpent-head terminals. Noticeably, similar brooches and buckles occur alongside more Germanic items in Lombard graves (e.g. Teramo, Martinsicuro) to the west, indicating access to the same sort of markets or at least integration with natives and their dress styles.²³

If for Emilia-Romagna Byzantine-period material culture and dress fittings are limited, for the Abruzzo data are better for piecing together Byzantine settlement and economics rather than personal ornamentation, a different picture prevails for the island province of Sardinia, where much fuller displays in death are evident.²⁴ Problems exist with the available artefacts, as the majority come from old and poorly documented or illegal excavations, and numerous museum acquisitions (including some in the British Museum) are unprovenanced; however, the picture has improved greatly with controlled excavations of cemeteries such as Santa Maria della Mercede di Norbello (Oristano province), enabling these early finds to be better understood.

Perhaps most striking is the visibility of soldiery – claimed as Byzantine *limitanei* or farmer-soldiers, settled (with families) in groups across the island, sometimes on estates, some based around the ancient *nuraghi* – and the provision of related finds extending even into the 8th century (e.g. Domu Beccia-Uras, Moseddu-Cheremule).²⁵ Such ‘weapon graves’ are very rare in Byzantine contexts on the mainland and suggest either a Sardinian tradition of burial ritual, or might even indicate that the rite was imported with the imperial units stationed on the island – potentially Avars, Huns, or even Lombards. The principal weapon types deposited in these graves are lances and knives, with far fewer swords or arrows, but the presence of some horse fittings and spurs indicates at



Plate 6 Seventh-century gold basket earring (5cm long) with filigree decoration and garnet and green glass inlays, presumed from an Italian (Lombard burial?) context, London, British Museum (PE 1872,6-4,595)

least some cavalry component. Belt mounts were largely not of the multiple type, and there is a good variety of buckle types, ranging from shield-shaped plates, to Corinthian, Syracuse and Hippo Reggius types, suggesting imports from Greece, Sicily and North Africa, although for each it is as likely that they were also manufactured in workshops in the main Byzantine *castra* on Sardinia.²⁶

Female tombs, intermingled with the males, feature a variety of personal jewellery, with earrings the more commonplace and distinctive, in gold, silver and bronze, ranging from looped globular and basket types (cf. **Pl. 6**) to extended ‘a pelta’ pendant forms. As with the belt buckles, whilst some imported items might be claimed from workshops in south Italy or from Rome, the likelihood is that many forms evolved through local production on the island, such as the distinctive ‘a globo mammelato’ (‘nipped sphere’) earrings.²⁷ Variations also exist in the brooches (disc, cross and zoomorphic) and beaded necklaces, but other accessories in graves might include arm-rings (also found in male tombs), hairpins and rings. Ceramics, regular features of Roman and later Roman tombs, are far fewer in the Byzantine period on Sardinia, but remain present and are indicative of a maintained ritual of food offerings.²⁸ All told, status and social position appear to be displayed in the dress and jewellery or equipping of these dead.

Lombards

These finds offer perhaps a valuable guide to the dress codes of the living in imperial cities and spaces on the Italian mainland where, overall, the ritual of burial either did not encourage the disposal/transmission of such material possessions or else communities held onto many items and buried the dead simply, if often with a few personal dress items. As noted, a strong contrast lies with the Lombards, who are distinguished archaeologically by their – in a good number of cases – expansive necropoleis, often with burial numbers extending into the hundreds, and with a high proportion featuring accompanying grave goods, personal fittings and ornaments, food offerings, or military hardware; the practice, evolving with time, prevails fully till the mid-7th century, and for some regions even into the very late 7th.²⁹ The long-established analysis of such grave goods is of course vital in showing the changing modes of deposition and display, in revealing status markers, and in identifying processes, levels and rates of acculturation – i.e. the take-up of indigenous or ‘Roman’ fittings and styles, the merging of or loss of designs and forms, the integration of Italians, adaptation to existing styles and new influences, as well as trade and contact. All modern cemetery excavation reports and finds analyses thus chart material types, chronologies, influences and changes as a route to interpreting site origins, status of community/ies, social composition (i.e. how ‘Lombard’ or how far a mixing of native and newcomer), regional and wider contacts, as well as changes through extended settlement (intermarriage, modified rituals, full transition to Catholic Christianity, etc.). Palaeopathological study of the actual human bones meanwhile provides insights into age, gender ratios, diet and health, but less weight is now put on classifying skeletons and thus burial population groups by race – ‘Nordic’, ‘Mediterranean’, etc. All of these efforts mean that studying



Plate 7 Silver belt buckle (4.2cm long) of 'Bologna' type of the first half of the 7th century, from the Cella cemetery at Cividale del Friuli

these tomb finds gives as many insights into Byzantine Italian material culture as Lombard.

Some problems exist still in that a tendency is to divide and label tombs and finds simply as 'Lombard' or 'late Roman' or 'autochthonous'. Potentially we might argue for a first generation of incomers who viewed themselves strongly as Lombards, but, as noted, right from the outset in their occupation of Italy, these groups occupied existing towns which had resident and more numerous (if reduced) native populations, and no doubt at least part-functioning local industries in ceramic manufacture and metalworking. Lands were divided up by the Lombard elite, but many native farmers remained in place.³⁰ Take-up of native/Roman/Italian/Byzantine goods will have been automatic in these contexts, although in the noted period of insecurity into the earlier 7th century, the Lombard elites especially probably sought to maintain some distance in identity, even if this may have been limited to hair, dress style, weapon display and name; the seal-rings mentioned above would form part of this formal display. The wealthy weapon-dominated burials at Trezzo sull'Adda are emblematic of this position, as is the group of five burials (elite soldiery and family) excavated on the height of the *castrum* at Monselice (near Padua) – a Byzantine fortress but held by the Lombards from 601–3. Each set of tombs retain the display symbolism of the invasion era, but the finds themselves, notably some of the belt-fittings (silvered work and bronze fixed-plate buckles with stamped and openwork decoration – cf. **Pl. 7** from Cividale), combs and knives, demonstrate borrowings from Byzantine Italian contexts, in form and design, and denote either direct purchases (obtained from merchants from Rome or Ravenna) or local workshops producing to similar styles. There is in effect a merging (active and passive) with local forms and markets.³¹

A final cemetery to draw upon, and one whose old excavation (in the 1890s) and whose materials have seen rigorous modern analysis, enabling fruitful discussion on displays of status and identities (clear, unclear, conscious and unconscious) and of contacts, is Castel Trosino in southern Le Marche province, ancient *Picenum*.³² Its context fits the picture outlined for the Abruzzo province discussed above, namely Byzantine territory worn down and conquered by the Lombards in the last decades of the 6th century – the key protagonists being Lombard forces from the duchy of Spoleto – but with imperial lands remaining along the coastline (reformed into the *Pentapolis* province). The Lombard-period burials are known in diverse points near the fortified township,

including one isolated and early rich burial featuring elaborate horse fittings. But the bulk of the burials, numbering 240, were gathered at the locality of Santo Stefano, the place name relating to a mid-7th-century church. This main necropolis appears distinct from an earlier Roman to Byzantine period burial ground (whose last depositions belong to the later 6th century); burials begin perhaps c. 580 and run for two generations until the second half of the 7th century.³³ This is not a burial ground with a mass of males in military garb, but it is one with strong status display in terms of the use of gold and silver by the elite members (**Pl. 7**). There are clear objects of Germanic tradition and perhaps production such as the stunning pair of gilded silver multiple animal-headed bow brooches in Tomb S or the more Gepid-Gothic designed pair in Tomb R. Tomb 90, with long sword, horse fittings, 'parade shield', belt sets, arrows, glassware, comb, brooch and other items, is perceived as belonging to one of the local Lombard leaders in the early 7th century; dress items and fittings are in gold, silver and bronze and all of high quality, and parallels exist in rich tombs from other well-known Lombard cemeteries at Nocera Umbra (Umbria) and at Cividale (Friuli).³⁴ But this same tomb contains a North African ceramic plate and a 'Coptic' bronze bowl (this perhaps Italian in production), and the gold saddle and multiple belt fittings are – from their simple droplet, 'dot and comma' decoration – deemed to be of Byzantine derivation, probably from workshops in Rome and Ravenna, as indeed is supported by finds from the Crypta Balbi in Rome (see below).³⁵ Zoomorphic brooches (particularly doves and horses) are fairly common in female tombs, which may also feature beaded necklaces, basket earrings or simple belt buckles. Gold disc-brooches – some of magnificent craftsmanship – occur only in the wealthy tombs (**Pl. 8**).³⁶

Profumo summarises the evidence from Castel Trosino thus: 'Offre corredi di cultura squisitamente bizantina accanto a quelli germanici, sicchè se è pensato ad una precoce e profonda penetrazione dell'arte di origine romana nella cultura dei Longobardi'.³⁷ Two material cultures are being displayed alongside each other and are sometimes shared, with 'native' presences in the cemetery fully apparent (46% of the total burials lacked gravegoods or had no more than plain dress items), suggestive of a rapid fusion of populations. There is no explicit division of Lombards and others here (or elsewhere, arguably, in the region), but far more of a



Plate 8 Gold disc brooch (6.5cm diam.) from Castel Trosino; decoration in filigree and central garnet setting, London, British Museum (PE 1989,9-6,1)

'bizantino-longobardo' material culture. The relatively few rich burials stand out and gain the limelight, but in the fuller cemetery context they might be viewed simply as a small dominant non-Roman elite, but one living, working, trading and interacting with a largely 'Roman' or Italian world (unless one claims local elites who adopted some of the traditional Lombard display systems – a logical route to retain land and status); their displays are used to forge or reinforce their own local identity of status. Acculturation is active from an early stage at Castel Trosino but it is by no means a process of Lombards simply becoming more Italian; rather, the Italians are already there and the process is one of diverse material influences coming into play or prominence. Yet even when the church is founded around the mid-7th century (interestingly in the central area of the necropolis which had been where many 'native' burials were sited), some symbolic display by the local elite persists, with a privileged (founder's) tomb (no.49) inside the church and featuring a silvered brooch, a large high quality comb, and a glass bottle. Tombs 67 and 44 are also closely associated with the church's construction period and these held a small number of finds such as gold cloth, a lance head and belt fittings.

Production, exchanges and connections

The finds catalogues for Castel Trosino, as for many other large Lombard cemeteries (though few have seen as much detailed modern scrutiny), identify therefore a number of items – especially high quality pieces like belts and brooches – determined to be of Roman-Byzantine manufacture, from city workshops and master craftsmen. In part the claims derive from decorative and iconographic parallels and from items not being of the standard Germanic mould, since often we lack direct Byzantine *comparanda*.

Most significant in the Italian context, however, are the 500 and more objects recovered from a dump of c. 680–700 of production materials (finished, incomplete, rejected, broken, draft, and other waste) and over 200 manufacturing components (scales, weights, scalpels, hammers, crucibles, lead models, moulds and matrices, etc.) of 7th-century date at the Crypta Balbi site in Rome (located not far from the Capitoline Hill).³⁸ Glass, metal, ivory and bone, and perhaps cloth production are all attested in this incredible assemblage, probably equating with workshops (of uncertain scale in terms of workers but in output deemed 'industrial') associated with an adjoining monastery; crucially all stages of production of specific artefact types can be followed.³⁹ Items included a whole range of buckles to suggest that types such as 'Corinthian' or 'Syracusan' were in production in Rome too (a logical act so as to supply troops and officials rather than to rely on imported supplies); and also included jewellery and zoomorphic brooches of the types noted above. But most importantly for our discussion, the Crypta Balbi finds contain both finished products and preparatory elements with clear links as well as direct parallels in Lombard necropoleis like Castel Trosino and Nocera Umbra. Thus, for example, in the case of Tomb 37 at Castel Trosino, a bronze bag-buckle, datable to the first half of the 7th century, is viewed as associated with 'Italo-Byzantine dress', and most probably was manufactured in Rome's Crypta Balbi, from where were recovered three identical buckles and a tongue (unfinished). In the same tomb

a multiple belt set in silver, comprising 13 components, with simple line, 'dot and comma' decoration, can, along with like sets in Tombs 90 and 199, be connected to a matrix/mould from Crypta Balbi.⁴⁰

This workshop centre was clearly designed for high status goods: belt sets, parade items, brooches, horse (bridle and saddle) fittings appear in precious metals, and the waste and dumped materials testify to a busy output. The elite at Castel Trosino can have been only one small outlet, the implication being that such 'Roman/Byzantine' goods were widely traded fully into Lombard zones and were clearly sought after. Ricci discusses the modes of operation and sale of goods and he questions whether major production points such as Crypta Balbi dominated.⁴¹ But did this mean itinerant smiths and craftsmen lost out? Were urban industries preferred (Italy was after all still a landscape dominated by towns, smaller than under Roman rule, but still the main *foci* for power and administration)? Were moulds sold on to other production points from the main ones? Were Lombard craft workers perhaps even trained here in Rome?

In terms of other materials, Sagui refers to the evidence of changing glass production in Rome and Italy generally in the 6th to 8th centuries.⁴² She highlights movements of glassware tied especially to pilgrims and relics, which include small ampoules which were amongst the items given to the Lombard Queen Theodelinda by Pope Gregory. Similar glassware will have been purchased at and sent out from Rome, thereby gaining a very wide distribution, cutting across territorial and cultural boundaries. Chalices are also noteworthy (but not rare) finds from urban, rural and military contexts (e.g. Santa Giulia at Brescia, at via de' Castellani in Florence, the fort of Castelseprio near Milan, and the hilltop settlement and *castellum* of Invillino in Friuli), but also in burials in Lombard territories. The assumption is that these were part of a wider Byzantine production with scattered (or regional) glass workshops (best known at Rome in the south, notably via the production waste at Crypta Balbi, but also on the island of Torcello in the Venetian lagoons in the north) in the 7th and 8th centuries. These chalices, like other goods, were being produced for markets clearly beyond the Byzantine spaces. But recently new excavation and finds suggest that we need to modify this rather simple image: certainly finds analyses at Florence⁴³ and at Brescia⁴⁴ identify evidence for local production, perhaps active from the Late Roman period in Florence's case, but changing in output as markets and tastes changed (perhaps responding indeed to output from the major manufacturing centres like Rome and Ravenna).

In this regard, a valuable approach to highlight is the work by Carlo Citter,⁴⁵ seeking to explore an archaeology of production, as applied to materials from Lombard Tuscany (*Tuscia*). He takes the picture back to the Roman period to consider how the documented late imperial arms factory or *fabrica* (for swords in particular) at Lucca was supplied with raw materials (mineral extraction occurring on Elba and near Luni); his expectation is that Lucca remained a point of production for iron work especially into the Early Middle Ages, although it is clear from both archaeological and then 8th-century documentary references that under the Lombards it was also home to various bronze- and goldsmiths; furthermore, as a seat of a Lombard duke, Lucca featured a

mint.⁴⁶ Finds from burials in *Tuscia* point to local or regional craftsmen producing Lombard but also Italo-Mediterranean jewellery such as disc-brooches, operating, he argues, ‘secondo tecnologie e modelli di tradizione mediterranea, fornendo prodotti destinati alla nuova committenza longobarda or longobardizzata’.⁴⁷ Effectively there was no major rupture, but more a shift to serving new markets, producing new/modified goods alongside the old.⁴⁸ There are also evidently imported items – the western seaboard of Tuscany will not have been avoided by merchants moving from Rome in the south to Sardinia and Corsica and on to Byzantine Liguria. At the eastern end of Liguria, excavations at the Byzantine fort-town of Luni have revealed busy levels of importation of goods from the southern and eastern Mediterranean; Citter draws attention to the find made here in 1978 of a marble matrix/mould for jewellery, specifically for elements for basket earrings; moulds may well have also been traded items. Such regional analyses offer, therefore, much scope for determining how courts, communities and individuals may have been supplied with metalwork and for determining how far there were continuities of production.

Conclusions

Labels can be difficult things. The basic divisions or labels in use in this paper – Gothic, Byzantine, Lombard – are necessary but not straightforward. Used as chronological, legal or politico-military labels they appear logical: it was essentially, for example, a conflict between Lombards (king, dukes, soldiers and allies) and Byzantines (generals, dukes, counts, soldiers and allies) in the later 6th century, and territories formulated by c. 600 were either Lombard or Byzantine/imperial. But, in the imperial spaces, differences existed between Italian/Latin and Greek zones, between north, centre and south, and between pope and governor-general. The privileged world of Ravenna will have been much different from society in a frontier town such as Luni in Liguria. Furthermore, the Byzantine military forces were drawn variously from the eastern provinces, from Egypt (as suggested for Byzantine Abruzzo), from frontier groups (e.g. Isaurians, Huns, even Lombards), or were native Italians.⁴⁹ Lombards too were no homogenous ethnic whole – Paul the Deacon knew that they included Saxons, Pannonians, Heruls, Huns, Noricans and others in their invasion force in the 560s; and they also used occasional allies such as Slavs and Avars. Once settled in Italy, Lombard duchies were not a unified entity under coherent royal control: geographically scattered dukedoms, such as in Tuscany, in Spoleto and in Benevento, were often fairly independent of the king and might treat with Rome separately.

When discussing the material cultures of these centuries therefore we should similarly expect problems in applying labels. As discussed, we can certainly recognise a ‘Lombard’ system of display in burial ritual, best observed in males being buried with weaponry and in certain artefact types (such as S-brooches, stirrup and bow brooches) in female graves, but this practice necessarily adapted and evolved: perhaps it was, for a while, fairly static in more militarised zones (as might be argued for Friuli in north-east Italy, facing diverse frontiers), but in zones where numbers of Lombards were fewer (perhaps the case for Benevento), these modes or items of display will

have been prone to more rapid change and acculturation. The furnished Lombard burials enable us to follow persistences of Germanic design and decoration and to observe new influences, changes in dress style, or preferences for artefact decoration, and so allow us to question rates as well as types of acculturation. But without comparable burial data for the ‘Byzantines’ in Italy – city dwellers, administrators, churchmen, farmers, merchants – we struggle to see how far Lombard or Germanic material culture and ideas influenced these; indeed, we learn more about ‘Byzantine’ art and dress and design from the Lombard graves. Some display (perhaps not designed though as actual ‘display’) in death is visible in some areas, however, notably in Sardinia; and this, in comparison with regions like the Abruzzo, provides at least some insight into regional or wider identities, even if these insights remain restricted. Our other partial guides are those natives discernable in Lombard cemeteries and also the craft products manufactured in centres like Rome, where the Crypta Balbi materials show imperial craftsmen receptive to working on and even developing goods and jewellery for the ‘Lombard’ market – but with the likelihood that non-Lombards too bought and displayed these. Does this make such finds less Lombard? And by Lombards wearing or using ‘Byzantine’ products, does that make those objects more Lombard and less Byzantine? Did a well-to-do or a middle ranking Lombard really dress any differently than a fellow Italian/Byzantine?⁵⁰

There is scope certainly to explore further how far Rome remained central to production and dissemination of prestige goods and to explore the geography of such contacts – was the diffusion strongest around Rome (e.g. extending into the duchy of Spoleto, into Tuscany and down into Benevento) or did it fully reach northern Italy? Or did similar production centres exist in Ravenna and even in Lombard *foci* like Milan and Cividale? How easy is it to distinguish Roman from Ravennate Byzantine products or even Lombard copies of these – after all, the moulds and matrices attested at Crypta Balbi could themselves have been sold on or duplicated. We also need to consider more the modes by which these products moved: direct orders commissioned by Lombard or other elites, orders made *via* commercial agents or traders meeting in urban markets, items gained from gift exchange or even tribute, or elites purchasing these on visits to the key urban centres? Whichever the case – and conceivably all the above may well have happened – the movements of people and objects reflect also the movement of ideas and desires beyond political and ethnic boundaries in 6th- and 7th-century Italy.

We can end on a final piece from the Crypta Balbi workshop ‘rubbish’ (though it is anything but rubbish for archaeologists!). The item is the lead seal (but not a ring) of a Lombard duke, Anso, which was found along with 14 other seals, although these others were all attributable to high-functioning Byzantine or papal functionaries of the 7th century. Given the Anso seal’s quite diverse iconographic format, the likelihood is that this was a Roman product made for a specific Lombard elite order. Marazzi⁵¹ notes how the seal might well have been due to go to a duke on Lombard soil; at the same time, however, he may well – like the Aufret at Bagnoregio noted above – have been a Lombard who had transferred allegiance to Byzantium or Rome. Alternatively, the presence of his seal still at Rome indicates that Anso might have switched back to the Lombard

side and so was not sent his more 'Byzantine' seal. Whichever the case, the biography and identity of its owner are as complex – or perhaps as simple – as this piece of lead that bears his name and forms our only guide to one of the many people living, working, interacting and dying in Early Medieval Italy.

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Notes

- For historical summaries see: N. Christie, *The Lombards*, Oxford, 1995; *idem.*, *From Constantine to Charlemagne. An Archaeology of Italy, AD 300–800*, Aldershot, 2006; C. Wickham, *Early Medieval Italy: Central Power and Local Society 400–1000*, London, 1981; J. Moorhead, 'The Byzantines in the West in the 6th century', in P. Fouracre (ed.), *The New Cambridge Medieval History I: c. 500–c. 700*, Cambridge, 2005, 118–39; *idem.*, 'Ostrogothic Italy and the Lombard invasions', in *ibid.*, 140–61; M. Innes, *Introduction to Early Medieval Western Europe, 300–900. The Sword, the Plough and the Book*, London, 2007.
- See in particular the papers in: V. Bierbrauer, O. Von Hessen and E. Arslan (eds), *I Goti* (Exh. cat., Milan - Palazzo Reale), Milan, 1994.
- For a discussion on war and its effects on towns, population and land, see: Christie 2006 (n. 1); on Byzantine Ravenna see these excellent publications: A. Augenti and C. Bertelli (eds), *Santi, banchieri, re. Ravenna e Classe nel VI secolo. San Severo il tempio ritrovato*, Milan, 2006; *idem.*, *Felix Ravenna. La croce, la spade, la vela: l'alto Adriatico fra V e VI secolo*, Milan, 2007.
- For an excellent guide to the conflict and the changes wrought on society, administration and landowning in the later 6th to 8th centuries, see: T.S. Brown, *Gentlemen and Officers. Imperial Administration and Aristocratic Power in Byzantine Italy, AD 554–800*, Rome, 1984.
- On the Lombards in general, see: G.C. Menis (ed.), *I Longobardi* (Exh. cat., Codroipo-Cividale), Milan, 1990; Christie 1995 (n. 1); there are also important papers in: G. Ausenda, P. Delogu and C. Wickham (eds), *The Langobards before the Frankish Conquest*, Woodbridge, 2009.
- R.A. Markus, *Gregory the Great and his World*, Cambridge, 1997, 99–107.
- See the papers in S. Lusuardi Siena (ed.), *Isignori degli anelli. Un aggiornamento sugli anelli-sigillo longobardi*, Milan, 2004, notably by: W. Kurze, 'Anelli a sigillo dall'Italia come fonti per la storia langobarda', E.A. Arslan, 'Ancora sugli anelli-sigillo', M. De Marchi, 'Il problema degli anelli in oro langobardi sigillari', and Lusuardi Siena, 'Osservazioni non conclusive sugli anelli sigillari langobardi "vecchi" – the latter two identifying the contexts of discovery, including some from privileged burials in churches. Two non-church examples of the first half of the 7th century come from the high status burial ground at Trezzo sull'Adda near Milan: E. Roffia (ed.), *La necropoli longobarda di Trezzo sull'Adda*, (Ricerche di Archeologia Altomedievale e Medievale, 12–13), Florence, 1986, tombs 2 and 4.
- Pohl notes how the later 8th-century Lombard historian Paul the Deacon observed, from viewing imagery of the early 7th century, that Lombard dress has changed much by his day: W. Pohl and H. Reimitz (eds), *Strategies of Distinction: The Construction of Ethnic Communities, 300–800*, Leiden, 1994, 24. A key recent volume is by G.P. Brogiolo and A.C. Arnau (eds), *Archeologia e società tra tardo antichità e alto medioevo* (Documenti di Archeologia 44 = 12° Seminario sul Tardo Antico e l'Alto Medioevo, Padova, 29 Sett. – 1 Ott. 2005), Mantua, 2007, exploring archaeologies of status in particular. Relevant here are papers by E. Zanini, 'Archeologia dello status sociale nell'Italia bizantina: trace, segni e modelli interpretativi', 23–46; S. Brather, 'Vestito, tomba ed identità fra tardo antico e altomedioevo', 299–310; and C. Giostra, 'Luoghi e

segni della morte in età longobarda: tradizione e transizione nelle practice dell'aristocrazia', 311–44.

- E.g. B. Luiselli, *Storia culturale dei rapporti tra mondo romano e mondo germanico*, (Biblioteca di Helikon, 1), Rome, 1992; P. Amory, 'The meaning and purpose of ethnic terminology in the Burgundian laws', *Early Medieval Europe* 2:1 (1993), 1–28; papers in Pohl and Reimitz (n. 8), notably B. Pohl-Resl, 'Legal practice and ethnic identity in Lombard Italy'; W. Pohl, 'Invasions and ethnic identity', in C. La Rocca (ed.), *Italy in the Early Middle Ages*, Oxford, 2002, 11–33, at 17–27; S. Gasparri, 'The aristocracy', in La Rocca, *ibid.*, 59–84; cf. more generally papers in L. De Finis (ed.), *Civiltà classica e mondo dei barbari. Due modelli a confronto*, Trento, 1991. The best summary overview is by: G. Halsall, *Barbarian Migrations and the Roman West 376–568*, Cambridge and New York, 2007, essential being chapters 2 'Defining identities', and 14 'New peoples, new identities, new kingdoms'.
- E. Cirelli, *Ravenna: archeologia di una città* (Contributi di Archeologia Medievale 2), Florence, 2008, 98–100. Cirelli's book is an excellent review of the available (and archive) archaeology of the Roman to Early Medieval city.
- A summary of Gothic Ravenna and its territory is in M.G. Maioli, 'Ravenna e la Romagna in epoca gota', in Bierbrauer *et al.* (n. 2), 232–51; but note much more recent archaeology and ideas in, for example, the exhibition publications *Santi, banchieri, re* (n. 3) and *Felix Ravenna* (n. 3), notably the papers by I. Baldini Lippolis, 'Abbigliamento e simboli di rango', in *Santi, banchieri, re* (n. 3), 134–7, and A. Augenti, 'Ravenna e l'alto Adriatico: sfere di interazione. Una prospettiva archeologica', in *Felix Ravenna* (n. 3), 27–32, who argue against straight ethnic associations in elements such as eagle brooches and stress instead rank and social cultural choices.
- Dress fittings of the court are discussed by Baldini Lippolis (*ibid.*).
- The main work on Gothic material culture and burials and hoards in Italy is V. Bierbrauer, *Die ostgotische Grab- und Schatzfunde aus Italien*, Spoleto, 1975. But see also the short overviews in E. Possenti, 'Abbigliamento e rango in Italia settentrionale tra V e VI secolo', in Brogiolo and Arnau (n. 8), 279–98 and in P. Porta, 'Considerazioni sull'oreficeria e sui metalli preziosi goti e longobardi in Italia', in I. Baldini Lippolis and M.T. Guaitoli (eds), *Oreficeria antica e medievale. Tecniche, produzione, società*, Bologna, 2009, 173–200, and noting at 176 the directives from the king of 510 (Cassiodorus, *Variae*, IV, 34). The sections in Bierbrauer *et al.* (n. 2) cover Visigothic Spain as well as Gothic traces and materials from south Russia and Romania in the 4th century and 6th-century Crimea where Gothic material culture endured. Many of the artefacts of the latter zone are described and discussed in the British Museum publication of the Berthier-Delagarde Collection: J. András, *The Berthier-Delagarde Collection of Crimean Jewellery in the British Museum and Related Material* (British Museum Research Publication no. 166), London, 2008. Much is offered in the analysis by K. Greene, 'Gothic material culture', in I. Hodder (ed.), *Archaeology as Long-Term History*, Cambridge, 1987, 117–42, with an emphasis on discerning the symbolic value amongst the Goths of eagle brooches, which were distinctive elements of high status dress from Spain to the Crimea.
- See the papers in G.P. Brogiolo and G. Cantino Wataghin (eds), *Sepulture tra IV e VIII secolo (7° Seminario sul tardo antico e l'alto medioevo in Italia centro-settentrionale. Gardone Riviera, 24–26 Ottobre, 1996)* (= Documenti di Archeologia, 13), Mantua, 1998, for northern Italy, *nb.* G. Gastaldo, 'I corredi funerari nelle tombe "tardo romane" in Italia settentrionale', 15–59, on 'late Roman' tombs, and A.M. Giuntella, 'Note su alcuni aspetti della ritualità funeraria nell'alto medioevo. Consuetudini e innovazioni', 61–75, on 6th- and 7th-century ritual on Sardinia.
- C. Cavallari, *Oggetti di ornamento personale dall'Emilia Romagna bizantina: I contesti di rinvenimento*, (Studi e scavi, nuova serie 13), Bologna, 2005.
- Ibid.*, 53–64.
- Ibid.*, 122–5. Arguably, however, data are far too few currently to support this attractive hypothesis. Her summary paper, 'Oreficeria tardoantica e altomedievale in Emilia Romagna: il problema dei contesti', in Baldini Lippolis and Guaitoli (n. 13), 149–171, identifies how few finds come from secure contexts or modern, controlled excavation.
- Ibid.*, 93–8. More detail on sites and numbers is provided in Cirelli (n. 10), 114–30, who also notes the high status sarcophagus burials at or in churches.

- 19 One lyre buckle from Classe, without settings to actually be worn, appears in fact to be a possible mould (Pl. 4), suggesting thereby local production of these items, otherwise viewed as Sicilian in origin: Cavallari (n. 15), 140–66, *nb* fig.128, 153.
- 20 Images and dress are discussed briefly in Baldini Lippolis (n. 11) and in her 'Appunti per lo studio dell'oreficeria tardoantica e altomedievale', in Baldini Lippolis and Guaitoli (n. 13), 103–25, stressing at 111 how here, 'la gerarchia di corte viene espresso mediante la collocazione dei personaggi, i loro abiti e gli ornamenti identificativi del grado sociale'. Cf. Zanini (n. 8), 29–32.
- 21 A. Staffa, 'L'Abruzzo fra tarda antichità e alto medioevo: le fonti archeologiche', *Archeologia Medievale* XIX (1992), 789–853; A. Staffa and W. Pellegrini, *Dall'Egitto copto all'Abruzzo bizantino: I Bizantini in Abruzzo (secc.VI–VII)*, Castello Ducale di Crecchio, 1993.
- 22 Staffa and Pellegrini (*ibid.*), 45–8 on wares and forms; Coptic style wooden seat and box fittings are seen as a further Egyptian link: 54–5, 59. On the site, cistern and other finds, see 30–7.
- 23 *Ibid.*, 24–7, 43–4, 60.
- 24 *Le sepolture in Sardegna dal IV al VII secolo, IV Convegno sull'Archeologia Tardoromana e Medievale*, (Cagliari, 27–28 June, 1987) (= Mediterraneo Tardoantico e Medievale. Scavi e Ricerche, 8), Oristano, 1990; Giuntella (n. 14); P.B. Serra, 'L'armamento', in P. Corrias and S. Cosentino (eds), *Ai confini dell'impero. Storia, arte e archeologia della Sardegna bizantina*, Cagliari, 2002, 149–57; D. Salvi, 'La gioielleria', in Corrias and Cosentino, *ibid.*, 159–63.
- 25 Serra, *ibid.*
- 26 *Ibid.*, 152–3.
- 27 Salvi (n. 24), 161–2.
- 28 Giuntella (n. 14), 65–8, who notes how such dress fittings and ornaments are found in cemeteries and graves beyond, around or inside churches.
- 29 Summarised in: Porta (n. 13), 187–97; N. Christie, 'Longobard weaponry and warfare, AD 1–800', *Journal of Roman Military Equipment Studies* 2 (1991), 1–26; Christie 1995 (n. 1); Christie 2006 (n. 1); best illustrated in Menis (n. 5); each with related and key bibliographies; the latter has short summary pieces, such as by O. Von Hessen on Lombard dress forms, ceramics, technologies.
- 30 For Friuli in north-east Italy, see M. Brozzi, *Il ducato longobardo del Friuli* (Publicazioni della Deputazione di Storia Patria per il Friuli, 6), Udine, 1981, and *idem.*, *La popolazione romana nel Friuli longobardo (VI–VIII sec.)* (Publicazioni della Deputazione di Storia Patria per il Friuli, 19), Udine, 1989. Brozzi discusses both Lombard and native or autochthonous tombs – the latter lacking the weapons or female dress and gift and ritual items of Lombard burials, although he does not properly consider the possibility of 'natives' within the Lombard cemeteries or of Lombards (of varied status) being buried without accompanying materials. Cf. also I. Ahumada Silva, 'Necropoli longobarde a Cividale ed in Friuli', in *Paolo Diacono e il Friuli altomedievale (secc.VI–X)*, *Atti del XIV Congresso Internazionale di Studi sull'Alto Medioevo* (Cividale-Bottennico di Moimacco, Sett. 1999), Spoleto, 2001, 321–56. More critical comment is by G.P. Brogiolo, 'Urbanistica di Cividale longobarda', in *Paolo Diacono, ibid.*, 357–87. On artefact types see Menis (n. 5), 364–475 (entries), with introductory comments on dress and manufacture by A. Tagliaferri, 'Il ducato di Forum Iulii', at 358–63. An excellent analysis of identity and cemeteries is by I. Barbiera, *Changing Lands in Changing Memories. Migration and Identity during the Lombard Invasions*, Florence, 2005, comparing Lombard Pannonian sites and north-east Italian (Friulian) necropoleis, and her 2007 paper, 'La morte del guerriero e la rappresentazione delle identità funerarie in Friuli tra VI e VII secolo d.C.', in Brogiolo and Arnau (n. 8), 345–61.
- 31 Trezzo: Roffia (n. 7); Monselice: P.M. De Marchi and E. Possenti, 'Rocca di Monselice (PD) - le sepolture longobarde', in Brogiolo and Cantino Wataghin (n. 14), 197–228, who also note the distinctive use of decorative monograms as a Byzantine-Italian trait.
- 32 The essential recent publications are: L. Paroli, 'La necropoli di Castel Trosino: un riesame critico', in L. Paroli (ed.), *La necropoli altomedievale di Castel Trosino. Bizantini e Longobardi nelle Marche*, Milan, 1995, 198–325, and *idem.*, (ed.), *L'Italia centro-settentrionale in età longobarda* (Atti del Convegno, Ascoli Piceno, 6–7 Ott., 1995), Florence, 1997, with full related bibliographies. The full catalogue of finds and related plates are published in two volumes by L. Paroli and M. Ricci, *La necropoli altomedievale di Castel Trosino* (Ricerche di Archeologia Altomedievale e Medievale, 32–33), Florence, 2005.
- 33 Paroli 1995 (n. 32), where chronologies and finds types are analysed; she notes, at 208, that the re-examination of finds does not allow for an extension of the cemetery's lifespan into the 8th century as suggested elsewhere.
- 34 Nocera Umbra: M.S. Arena and L. Paroli (eds), *Arti del fuoco in età longobarda. Il restauro delle necropoli di Nocera Umbra e Castel Trosino*, Rome, 1994; Cividale and territory: Tagliaferri (n. 30) and Ahumada Silva (n. 30), though this latter without consideration of trade, Italo-Byzantine influences and rates of acculturation.
- 35 Paroli 1995 (n. 32), 216–36. Cf. Tomb 9 with a like mingling of Lombard and Byzantine including silver belt ends and a Syracuse-type buckle.
- 36 E.g. S and 115: Paroli 1995 (n. 32), 273–81; Paroli and Ricci 2005 (n. 32), 33–5, 75–9. Tomb 115 also contained two necklaces with glass paste and amethyst beads plus attached Byzantine gold coins.
- 37 M.C. Profumo, 'Le Marche in età longobarda: aspetti storico-archeologici', in Paroli 1995 (n. 32), 127–83, at 130.
- 38 See the summary volume: M.S. Arena, P. Delogu, L. Paroli, M. Ricci, L. Sagui and L. Venditelli (eds), *Roma dall'antichità al medioevo. Archeologia e storia nel Museo Nazionale Romano Crypta Balbi*, Milan, 2001; on the finds and their production and exchange, see M. Ricci, 'Relazioni culturali e scambi commerciali nell'Italia centrale romano-longobarda alla luce della Crypta Balbi in Roma', in Paroli 1997 (n. 32), 239–72.
- 39 As the later example of San Vincenzo al Volturno in Molise province shows, monasteries became major foci for trade manufacturing and dissemination in the Early Middle Ages: J. Mitchell and I.L. Hansen (eds), *San Vincenzo al Volturno 3: The Finds from the 1980–86 Excavations* (Studi e ricerche di archeologia e storia d'arte, 3), Spoleto, 2001; K.M. Bowes, K. Francis and R. Hodges (eds), *Between Text and Territory. Survey and Excavations in the Terra of San Vincenzo al Volturno* (British School at Rome Archaeological Monograph 16), London, 2006.
- 40 Paroli 1995 (n. 32), 237–41.
- 41 Ricci (n. 38).
- 42 L. Sagui, 'Produzioni vetrarie a Roma tra tardo-antico e alto medioevo', in L. Paroli and P. Delogu (eds), *La storia economica di Roma nell'alto medioevo alla luce dei recenti scavi archeologici* (Atti del Seminario, Roma, 2–3 Aprile 1992), Florence, 1993, 113–35, at 127–31.
- 43 M. Mendera, 'Materiale vitreo', in F. Cantini, C. Cianferoni, R. Francovich and E. Scamporrì (eds), *Firenze prima degli Uffizi. Lo scavo di via de' Castellani: contributi per un'archeologia urbana fra tardo antico ed età moderna*, Florence, 2007, 551–93.
- 44 M. Ubaldi, 'I vetri', in G.P. Brogiolo (ed.), *S. Giulia di Brescia. Gli scavi dal 1980 al 1992. Reperti preromani, romani e alto medievali*, Florence, 1999, 271–307; M. Verità, 'Analisi di reperti vitrei e scarti di lavorazione di tarda età romana provenienti dagli scavi del monastero di Santa Giulia a Brescia', in *ibid.*, 309–14.
- 45 C. Citter, 'I corredi nella Tuscia longobarda: produzione locale, dono o commercio?', in Brogiolo and Cantino Wataghin (n. 14), 179–95.
- 46 *Ibid.*, 183–5.
- 47 *Ibid.*, 183.
- 48 Landscape exploitation and mineral extraction thus continued, albeit at a reduced scale, and Citter argues that lesser but accessible extraction sites may have been employed; at the same time more recycling of metals may have occurred: *ibid.*, 185–89.
- 49 See Brown (n. 4) on soldier identities and a presumed progressive Italianisation of the army units.
- 50 Cf. Ricci (n. 38), 269.
- 51 F. Marazzi, 'Il sigillo plumbeo del 'dux' Anso dall'edera della 'Crypta Balbi' in Roma', in Lusuardi Siena (n. 7), 85–8, at 87.

Sicily and Southern Italy: Use and Production in the Byzantine *Koiné*

Isabella Baldini Lippolis

The existing documentation on gold jewellery from Sicily and southern Italy throws up many problems which limit the possibilities of performing an organic, comprehensive analysis of the phenomena of its production and use. The first difficulty is the widespread lack of information about general contexts: very few settlements have actually been fully excavated, while the greater part of the existing information comes from cemeteries located near churches, with little or no information on the settlement context.

Furthermore, many of the most famous artefacts are chance finds, some dating back to the end of the 19th or the beginning of the 20th century. The sources from the period of their discovery clearly mention the widespread practice of looting archaeological areas, with the dispersion of an enormous number of artefacts, some sold on the antiquities market, others melted down.¹ This phenomenon occurs frequently throughout the whole of southern Italy and has never completely disappeared.²

In addition there is little scientific analysis of recent, better-documented finds;³ this aspect impacts on the development of studies, forcing them to continue to be based on repertories which lack fundamental methodological and cognitive prerequisites. For this reason, even today objects are sometimes identified using very general terms, without any real chronological and cultural equivalent, as in the case of the prejudicial distinction between 'autochthonous', 'Byzantine' or 'barbarian'.⁴ Comprehension of these and other aspects must begin with a careful analysis of the context, technical and typological features of a piece of jewellery, continue by establishing the morphological relationship with the typology, and conclude with comparisons with similar artefacts from the same cultural area.

Due to the lack of any reliable documentation on the objects that have disappeared into the illegal antiquities market, it is difficult to conduct a general quantitative analysis or an examination of individual classes of objects in order to put forward a hypothesis of interpretation of the general phenomenon and the diffusion of these objects within a culturally homogeneous territory. The scarcity of contextual data furthermore impedes the development of a more detailed chronological outline illuminating the relationships and concordances between the findings. As a result the search for comparisons and technological traditions needs to be extended beyond specific territories. This, however, in turn increases the risk of underestimating the differences between the different regions and increasing the impression of uniformity, which does not necessarily correspond with the historical or cultural situation.

Finally, the situation outlined leaves no room for an adequate evaluation of the functions and social significance of the artefacts. These are aspects which can only be

reconstructed by a careful examination of the associations between objects of the same provenance and from the wider cultural and geographic context. A global reconstruction is possible only through a convergence of data from different types of investigation.

Despite these difficulties, the evidence from Sicily and southern Italy is of considerable interest, both in terms of the number of examples and their diverse nature; these aspects are indicative of a social structure which manifests a wide range of expressive means and economic assets, and a variety of formal choices, adopting much more widespread models. Even if a better knowledge of the find contexts is required, the artefacts invite us to make a distinction between the different situations; they furthermore confirm observations that derive also from examination of other areas.

First of all one can differentiate between objects from necropoleis and those found in hoards. Indeed in the first case, objects are deliberately abandoned in the grave and assume a precise significance of *status*, linked to the burial ceremony and the social representation of the dead and their families. As we will see, the second case is linked to occasions that are set apart from a specific or individual expressive choice.⁵

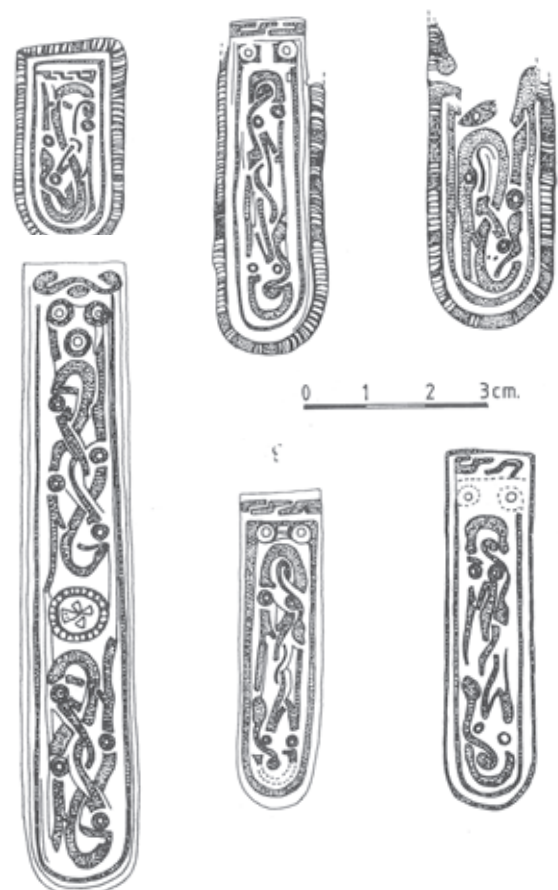


Plate 1 Agemina applications from Piano di Carpino

Plate 2 Necklace from Nissoria



The value of precious ornaments in graves further qualifies the distinction between tombs. The importance of a grave can naturally be also assigned to other meaningful elements, such as funeral epigraphs, or its privileged location for religious reasons. At these levels of social distinction, the presence of jewellery is a further signal of belonging to an elite group.

From a quantitative and typological point of view, the jewellery most often deposited in female tombs seems to be a pair of earrings, a custom that was also widely documented in the Classical period; only rarely do they appear in association with rings, and even less frequently with necklaces and other jewellery. In some areas, as for example Apulia, female bronze brooches are also frequently attested.⁶

In male graves, belt buckles and sets, often made of bronze,⁷ and more rarely decorated with *agemina* (Pl. 1)⁸ or inlays of precious metals, are the items documented almost exclusively; they appear to be a widespread distinctive symbol of social rank, perhaps together with rings, for which we have less contextual evidence. Although there are no presuppositions for a complete anthropological analysis, it continues to be the woman who represents the economic assets of the family in collective ceremonial occasions and particularly in the burial rite, showing social and economic status. An isolated tomb discovered in Nissoria (Sicily) may represent a significant example of this: it contained a necklace (Pl. 2), a pair of 'basket' earrings (Pl. 3) and two rings, one gold (Pl. 4) and the other silver (Pl. 5).⁹ The necklace was a chain type necklace with stones and pendants, similar to examples from Cyprus¹⁰ and Egypt (6th to 7th century);¹¹ the clasp recalls a necklace from Pantalica,¹² and types found throughout the eastern Mediterranean.¹³

The 'basket' earrings, documented in Italy in their most typical form only after the Lombard conquest, derive from prototypes of the 5th century.¹⁴ Their diffusion in the 6th to 7th centuries occurs over a vast geographical area with concentrations between Hungary and Sicily (Pl. 6), where different variations have been recorded.

One of the ring bezels from Nissoria is set with a hoarded coin of Valentinian III: the coin has been placed with the reverse side face up, displaying a Christological monogram between two stars (Pl. 5).¹⁵ Compared with other examples,¹⁶ this choice may perhaps allude to the original marriage significance of the subject. The second ring reuses a bead (Pl. 4).¹⁷ Therefore, the artefacts associated with this grave cannot give any indication of the economic level of the dead woman's family within her community. The isolated position of the tomb, however, and its wealth reveal its status, which in turn permits a deeper reflection on the cultural level: it demonstrates participation in a symbolic language constructed



Plate 3 'Basket' earring from Nissoria



Plate 4 Gold finger-ring from Nissoria



Plate 5 Silver finger-ring from Nissoria

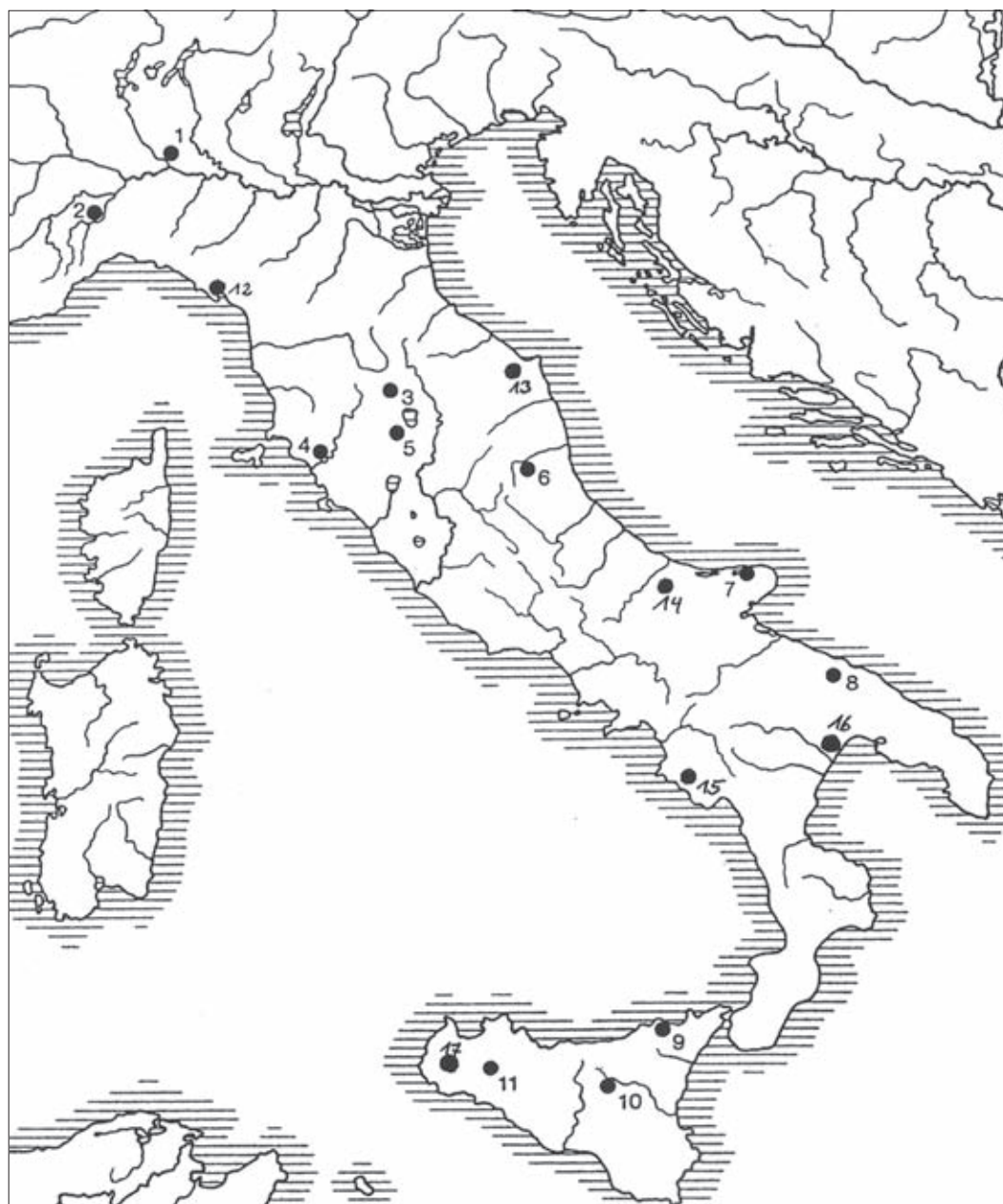


Plate 6 Distribution of 'basket' earrings in Italy, type 2c

1. Pavia
2. Acqui Terme
3. Arezzo
4. Grosseto
5. Chiusi
6. Castel Trosino
7. Avicenna
8. Rutigliano
9. Patti
10. Nissoria;
11. Corleone
12. Luni
13. Grotta del Mezzogiorno
14. Larino
15. Pattano
16. Metaponto
17. Salemi

on the basis of various external references. The typology of most of the jewellery stands apart from a strictly local environment and demonstrates, by means of an 'international' expressive code, an elevated social level. The rings lie outside of this code because of the material used, their simple workmanship and considerable difference in quality in comparison with the other objects in the grave.

The pair of 'basket' earrings also stands out, but for other reasons, as they are not widely diffused throughout the Byzantine Empire. Here an important comparison can be made with the diffusion of 'half-crescent' earrings, documented in several graves between the end of the 6th and the beginning of the 7th century in Sicily (Syracuse,¹⁸ Butera,¹⁹ Sofiana,²⁰ Mimiani,²¹ Racineci,²² Megara Hyblea²³) (Pl. 7) and in Apulia (Rutigliano) (Pl. 8).²⁴ It is evident that the areas of distribution of these two classes of earrings ('basket' and 'half-crescent') do not overlap in terms of their chronology, with the exception of very few examples of certain types found only in marginal zones, which evidently demonstrates different symbolic requirements of identity. From this point of view, southern Italy and Sicily above all qualify as border areas of



Plate 7 Distribution of 'half-crescent' earrings in southern Italy

1. Rutigliano;
2. Mimiani;
3. Megara Hyblea;
4. Racineci;
5. Butera;
6. Syracuse



Plate 8 Pair of earrings from Rutigliano

the Empire, where behavioural and productive traditions typical of the Italic peninsula also appear to a reduced degree.

If 'basket' earrings are exceptionally well-represented in Sicily and do not appear at all in other regions of the Byzantine world, then the 'half-crescent' earrings are the most western evidence of this Byzantine production. In all cases these are the only precious objects found in a grave, and in cases when the necropolis with which the grave is associated has been investigated, the deposit is associated with a markedly exceptional situation. One example is the site of Racineci:²⁵ dug out of the rock, the cemetery included about 80 graves, some of which were multiple. The majority only contained glass beads from necklaces and a few other objects; however, two of them had a Byzantine-type openwork ring,²⁶ and a pair of 'half-crescent' earrings (**Pl. 9**).²⁷ The suggestion that these might be considered local productions, perhaps Syracusan, influenced by Byzantine models, arises from the number of other Sicilian examples.²⁸ However, the hypothesis is difficult to verify because of the lack of distinctive elements that can be attributed with certainty to *local* manufacture. The type is well-known in public and private collections and has a considerable number of variations; examples have been documented over a vast area, covering Egypt, Turkey, Crete, Greece, Albania, Austria and Hungary;²⁹ they have also been found with coins.³⁰

The popularity of these earrings throughout the Mediterranean is matched by the distribution patterns of other jewellery, in particular necklace pendants (**Pl. 10**),³¹ earrings with drop pendants³² and necklace clasps,³³ of Byzantine origin, which share similar technical, iconographic and stylistic features.

Therefore, we are probably dealing with jewellery of Byzantine creation, which revises shapes that already existed previously, primarily in the Syrian-Cypriot area.³⁴ The simplicity of the workmanship and extensive decoration may have determined the success of the models, to which a particular cultural and status value was attributed, for reasons that we are unable to comprehend completely (religious reasons or reasons connected to social roles and behaviour). Therefore, on the basis of their symbolic value they became not only luxury export objects, but also models for local productions.

It is evident that the various customers involved in the phenomenon shared a common expressive language; in burials



Plate 9 Earring from Racineci

(as for example in Sicily and Apulia) and probably on other ceremonial occasions as well, this type of jewel was considered particularly suitable for connoting privileged graves, perhaps in part because of the eschatological value of the subject: in most cases, peacocks and eagles, both Christian symbols of immortality.³⁵

Between the end of the 6th and the mid-7th century, however, it is likely that the production of 'half-crescent' earrings in Sicily can be connected to the survival of some socially stratified cities with an affluent upper class which shared a formal Mediterranean language. The example from Racineci demonstrates that in the same period this social class also had access to a variety of imports and locally produced items, inspired by external models. Moreover it seems evident that a burial context may only partially reproduce the behavioural habits of its community; however, it is still the expression of a social language which tends to select the objects deposited in the graves using specific criteria. In an apparently standardised documentation, it is therefore important to deal with the problem of the symbolic value attributed to the artefacts in specific cases, creating a backwards reconstruction of the possible paths of transmission and reception of the models.

Even isolated examples can contribute to clarifying the overall picture. One example comes from a grave in Senise (Basilicata), whose grave goods included a pair of earrings and a cross pendant (**Pl. 11**).³⁶ The latter has an extremely simple form, which finds comparisons across the entire Mediterranean area.³⁷ The earrings are instead an unusual variation of the 'basket' type,³⁸ with the addition of *cloisonné* motifs in the ring and disc pendant, which bears the image of a female bust. A *solidus* of Tiberius Heraclius and Tiberius (659–68) is impressed on the reverse. Close analogies with other pendants found in southern Italy (Canosa) (**Pl. 12**)³⁹ and in Comacchio (**Pl. 13**)⁴⁰ may be noted; furthermore, a basket earring with pearls in the Museum of Naples⁴¹ has the same coin on the reverse. Production of these pieces of jewellery is traditionally attributed to the goldsmiths of Constantinople, the centre of development for the *cloisonné* technique. However, if we consider their regional diffusion, it seems more likely that the known examples reveal a customer base and local class of specialised craftsmen, with a possible reference to products and techniques that spread from the capital.



Plate 10 Gold pendant, Athens, Kanellopoulos Museum



Plate 11 Jewellery from Senise, Naples, Museo Archeologico Regionale



Plate 12 Disc-brooch from Canosa, London, British Museum (PE 65,7-12,1)



Plate 13 Disc-brooch from Comacchio, Baltimore, Walters Art Museum



Plate 14 *Bractea* with the Adoration of the Magi from southern Italy

A similar phenomenon in terms of the area of diffusion and internal homogeneity can also be found in the gold *bracteae* discovered in southern Italy (Pl. 14),⁴² Basilicata⁴³ and Calabria,⁴⁴ some of which have been found in graves. The rather simple decoration permits a clear differentiation from the Byzantine models⁴⁵ from which they originally derived. Stylistically and typologically, some of them (Pl. 15) are comparable with examples from Albania,⁴⁶ which may have been imported from southern Italy or belong to the same cultural area. Even in this case, a customer base and regional production which adopted and developed models imported from outside, can be confirmed.

A different system of interpretation must be applied to the analysis of hoards: in contrast to burial contexts, such treasures are not necessarily the result of a symbolic selection of objects, but correspond to different situations, strictly linked to the need to safeguard – for various reasons – a certain number of precious goods. Sometimes these are objects for female personal use, as for example single or multiple *parures*: ranging from the basic *parure* characterised by a pair of earrings, a necklace and a ring (Palmyra),⁴⁷ to more complex ones with bracelets (Caesarea Maritima⁴⁸ and Constantinople⁴⁹) or belt buckles (Constantinople),⁵⁰ to the double *parures* (Mersin, but with only one pair of earrings).⁵¹ These hoards are generally composed of objects from the same period, and in some cases (Rome, at S. Martino ai Monti⁵² and in Piazza della Consolazione;⁵³ Reggio Emilia⁵⁴), one of the objects bears the name of the owners. The abandonment of these goods evidently reflects a situation of impending danger, when it became necessary to temporarily give up those ornaments which were effectively in use. The collection directly reveals the assets and symbolic requirements of the owners, allowing us to draw connections and comparisons with other contexts, both similar and different.

Some hoards, however, contain either coins alone or associated objects that are much less homogenous. The treasures in these cases include both male and female jewellery, coins, *vasa* and also fragments of other precious artefacts (necklace clasps, pieces of silver *missoria*, etc), evidently preserved for their intrinsic value. In this case,



Plate 15 Brooches incorporating *bracteae* from Cannarò and Caraconessa

although the reasons for the deposit should be considered analogous, the collection and association of artefacts, which sometimes includes objects from different chronological phases, probably reveals a different and more complex situation.

Often the same type of jewellery is replicated more than once, with a greater occurrence of necklaces and rings, while earrings appear only rarely, the inversion of the situation characteristic of earrings in burial contexts. Evidently, as regards these treasures, the intrinsic value of the precious metal was the essential factor in choosing the objects; therefore their association perhaps does not so much demonstrate the behavioural choices of the owners, as their ability to acquire and hoard wealth.

We know of several Sicilian treasures belonging to this second category. One of these was discovered during agricultural works in 1903 at Pantalica, in a cavity in the rock covered by a stone slab, in the courtyard of the so-called *anaktoron*.⁵⁵ Here a bronze vase 'in the shape of a chalice' was found which contained 15 pieces of jewellery and hundreds of coins of the Emperors Constans II, Constantine IV, Heraclius and Tiberius (641–68); the coins for the most part were later lost.⁵⁶ One portion of the objects was sold on the antiquities market after a quick graphic and photographic documentation. The jewellery included a pair of earrings, six gold chain necklaces with stones and pearls (Pl. 16), a bracelet (Pl. 17), a 'centurino', a gold *bulla* and three rings, two of which were probably wedding rings, while a fourth ring was attributed to the Classical period. Based on the chronology of the coins, the deposition of the treasure can be dated to the second half of the 7th century.⁵⁷

Another treasure, whose exact composition is unknown, comes from Syracuse.⁵⁸ The place of discovery was hypothetically identified with the remains of the 'Baths of



Plate 16 Necklaces from Pantalica



Plate 17 Bracelet from Pantalica, Sicily, New York, Metropolitan Museum of Art



Plate 18 Wedding ring from Syracuse, Palermo, Museo Archeologico Regionale



Plate 19 Ring from Egypt, Baltimore, Walters Art Museum



Plate 20 Bracelet from Egypt, Baltimore, Walters Art Museum

Daphne', the site of the murder of Constans II in 668.⁵⁹ This cannot be proven by archaeological evidence, but only hypothesised on the basis of the exceptional nature of one of the objects. In addition to several gold *solidi* of Constans II, the treasure included a gold octagonal wedding ring (Pl. 18)⁶⁰ with scenes of the Christological cycle worked in *agemina* and niello (the Annunciation, the Visitation, the Nativity, the Adoration of the Magi, the Baptism, the Crucifixion, and the Three Marys at the Sepulchre). The bezel bears a full-length image of the spouses on either side of Christ, with a Greek inscription taken from Psalm 5:13. It is without doubt an object of considerable

quality, but should not necessarily be attributed to the imperial couple (the court treasure assets depended in fact on a complex system that regulated their administration and responsibility). It ought rather to be placed in the context of the presence of high class patrons from the court of Syracuse.

In the general typology of octagonal band rings, often, but not exclusively recognisable as wedding rings, there are other examples of particular relevance, with New Testament scenes in niello on the band, like the well-known ring from Egypt in the Walters Art Museum, Baltimore (Pl. 19),⁶¹ or the ring in the Dumbarton Oaks Collection in Washington DC, from the Syro-



Plate 21 Necklace from Mazara del Vallo, Palermo, Museo Archeologico Regionale

Palestinian area.⁶² In the latter example, the addition of the names of the owners *Petros* and *Theodoti* demonstrates the possibility of personalising objects, which is absent in the Syracusan example.

The exceptional nature of the jewellery in the Sicilian repertory does not allow the octagonal ring to be attributed with certainty to local workshops, although the conditions for a high level of internationally inspired craftsmanship were present in Syracuse. It is, however, revealing that in the choice of such a symbolic, important object, with a specific matrimonial function, the owner adhered to a trend common throughout the Mediterranean area: like other categories of devotional objects, it can be iconographically connected with the Holy Land cycle (Pl. 20),⁶³ giving generic protective power over the owner.

In addition to the intrinsic and decorative value of the jewellery, in this case we must also emphasise its importance as an indicator of the Sicilian upper classes' adherence to more widespread behavioural and symbolic models. They assigned a fundamental, 'qualitative' importance to the expression of their own modes of self-representation. Within the local upper classes, social stratification was also expressed by different uses of status objects: from a relatively broad level, indicated by the widespread use of earrings, to another, very elite level, which used complete or partial parures of jewellery. This brings us finally to a very limited nucleus of several families who hoarded precious objects, perhaps even independently of standard practice, or who concentrated their attention on very unusual artefacts with a strong symbolic value, perhaps made upon request or specifically imported.

These distinctions, which are easily noted in the different types of contexts examined, are also confirmed in the obvious differences between those hoarded deposits; it is useful to recall another Sicilian find, at Campobello di Mazara del Vallo



Plate 22 Necklace from Mazara del Vallo, Palermo, Museo Archeologico Regionale

(TP):⁶⁴ the nucleus of this consisted of a pair of earrings, '*una borsa di tessuto d'oro...un diadema*', three necklaces (Pls 21–23) and 150 gold coins. The lower chronological limit of the hoard is indicated by three gold *solidi* of Honorius and Theodosius II, used as clasps and in the central setting of a necklace.⁶⁵ The later coins, of Constantine V (741–75), have given rise to a hypothetical connection between the burying of the treasure and the Muslim raids.

The context highlights a situation that differs to some extent from the examples of Syracuse and Pantalica, where the gold objects and coins, with their much more consistent value, may above all represent 'refuge goods', coinciding with a serious economic and political crisis. In the different cases reviewed, however, the prevalence of necklaces is evident, often numbering several examples, whereas they are almost completely absent in other contexts such as burials. Indeed, perhaps because of their lesser diffusion and value, increased by their frequent settings with precious stones or coins, these necklaces do not assume simply a symbolic meaning in the hoarding process of prominent families.

Therefore, from a general point of view, the jewellery of Sicily and southern Italy fully enters the spectrum of jewellery production in the Mediterranean both in terms of typologies and the value assumed in the collective imagination. The Sicilian examples from the end of the 6th and the 7th century



Plate 23 Part of a necklace from Mazara del Vallo, Palermo, Museo Archeologico Regionale

seem in particular to be closer to the Greek-Byzantine attestations in terms of morphology and variety of types, signs of a remarkable social dynamic and a technological and cultural adherence to models and formal schemes which find its inspiration in the capital of the Byzantine Empire and derived from its capacity for diffusion from this prestigious place. There is also no shortage of more isolated examples of typologies diffused exclusively through the Italian peninsula, or even exclusively in one region, as in the case of some 'basket' earrings.

In many instances it is still difficult to clearly distinguish the formal characteristics of 'Constantinopolitan' models from imitations, in part because of the uniformity of the record. This phenomenon derives from a shared desire for emulation, expressed by prominent, culturally defining social levels. The internal stratification of these, which appears complex in terms of availability and use of different models, is most identifiable at an archaeological level. In the outlined panorama of formal homologation, a few individual artefacts, particularly rare in terms of their weight, workmanship, iconography or connection to a milieu different to the prevalent Constantinopolitan one, stand out even more noticeably. They indicate the presence of a true, very limited, local 'aristocracy', probably linked to the persistence of specific urban structures. It was within these cities, unfortunately still little known in archaeological terms, that this elite found an audience for its repertoire of behaviour and display, symbols of a still important and articulated urban culture.

Notes

- 1 For example: P. Orsi, *Sicilia Bizantina*, I, Rome, 1942, 137–53. On the general problem: I. Baldini Lippolis, *L'oreficeria nell'impero di Costantinopoli tra IV e VII secolo*, Bari, 1999, 11–12.
- 2 On this problem in connection with classical artefacts: D. Graepler and M. Mazzei, *Provenienza: sconosciuta! Tombaroli, mercanti e collezionisti: l'Italia archeologica allo sbaraglio*, Bari, 1996.
- 3 The documentation is heterogeneous: see, for example, Orsi (n. 1),

- 117–33; D. Adamesteanu, 'Nuovi documenti paleocristiani nella Sicilia centro-meridionale', *Bollettino d'Arte* 3 (1963), 259–74; L. Bonomi, 'Cimiteri paleocristiani a Sofiana (retroterra di Gela)', *Rivista di Archeologia Cristiana* 40 (1964), 167–220; E. A. Arslan, 'Recenti scavi a Botricello e Roccelletta (Catanzaro)', in *Atti II Congresso nazionale di Archeologia Cristiana*, Rome, 1971, 107–25; S. Patitucci Uggeri, 'La necropoli longobarda di Gennarano sul confine bizantino di terra d'Otranto', *Quaderni dell'Università di Lecce* 1 (1974), 5–31; R. Iorio, 'Presenze bizantino-longobarde a Belmonte', *Note di archeologia medievale altamurana* 19–20 (1978), 47–136; M. R. Salvatore, 'Antichità altomedievali in Basilicata', in *La cultura in Italia fra Tardo Antico e Alto Medioevo*, *Atti del Congresso*, Rome, 1981, 947–64; M. Salvatore, 'Un sepolcro altomedievale in agro di Rutigliano (Bari). Notizie preliminari', *Rivista di Archeologia Cristiana* 57 (1981), 127–60; A. Damato, 'Manufatti di abbigliamento romani e altomedievali da Rutigliano (Bari)', *Taras* 4/1 (1984), 209–14; N. Lavermicocca, G. La Notte and G. Pacilio, *Sant'Apollinare di Rutigliano, Storia, Scavo, Restauro*, Rutigliano, 1987; C. D'Angela (ed.), *Gli scavi del 1953 nel piano di Carpino (Foggia). Le Terme e la necropoli altomedievale della villa romana di Avicenna*, Taranto, 1988; R. Spadea, 'Crotone: problemi del territorio fra tardoantico e medioevo', *Mélanges de l'École française de Rome, Moyen-Age* 103/2 (1989), 553–73; C. D'Angela and G. Volpe, 'Insediamento e cimiteri rurali tra tardoantico e altomedioevo nella Apulia centro-settentrionale: alcuni esempi', *Mélanges de l'École française de Rome, Moyen-Age* 102 (1991), 785–826; F. D'Andria and D. Whitehouse (eds), *Excavations at Otranto, II, The Finds*, Lecce, 1992; P. Peduto (ed.), *S. Giovanni di Pratola Serra. Archeologia e storia nel ducato longobardo di Benevento*, Salerno, 1992; C. D'Angela, 'Il cimitero altomedievale di Mass. Basso a Canne', in *Atti del XIII Convegno Nazionale sulla preistoria, protostoria e storia della Daunia*, Foggia, 1993, 159–72; D. Ciminale, P. Favia and R. Giuliani, 'Nuove ricerche archeologiche nell'insediamento altomedievale di Belmonte (Altamura-Bari)', *Taras* 14/2 (1994), 339–440; C. D'Angela and G. Volpe, 'Aspetti storici e archeologici dell'Alto Medioevo in Apulia', in R. Francovich and G. Noyé (eds), *La storia dell'alto Medioevo italiano (VI–X secolo) alla luce dell'archeologia*, Firenze, 1994, 299–332; E. Riemer, *Romanische Grabfunde des 5.–8. Jahrhunderts in Italien*, Leidorf, 2000, 394–465; G. Roma (ed.), *Necropoli e insediamenti fortificati nella Calabria settentrionale, I, Le necropoli altomedievali*, Bari, 2001; M. Corrado, 'Note sul problema delle lamine bratteate altomedievali dal Sud Italia', in R. Fiorillo (ed.), *III Congresso Nazionale di Archeologia Medievale*, Firenze, 2003, 110–14.
- 4 For a methodological consideration of this problem with respect to Visigothic jewellery, see J. Pinar Gil, 'Problemi di valutazione storico-archeologica delle produzioni d'oreficeria visigota nel V secolo', in I. Baldini Lippolis and M. T. Guaitoli (eds), *Oreficeria antica e medievale. Tecniche, produzioni e società*, Bologna, 2009, 127–47; see also, I. Baldini Lippolis, 'Abbigliamento e simboli di rango', in A. Augenti and C. Bertelli (eds), *Santi, banchieri, re. Ravenna e Classe nel VI secolo. San Severo ritrovato*, Milan, 2006, 133–47.
- 5 Baldini Lippolis (n. 1), 29–43; M. Baldassarri and M. C. Favilla, 'Forme di tesaurizzazione in area italiana tra tardo antico e alto medioevo: l'evidenza archeologica', in S. Gelichi and C. La Rocca (eds), *Tesori. Forme di accumulazione della ricchezza nell'alto medioevo (secoli V–XI)*, Rome, 2004, 143–205; I. Baldini Lippolis, 'L'età tardoantica', in *Matilde di Canossa, il Papato, l'Impero. Storia, arte, cultura alle origini del Romanico*, Milan, 2008, 402–12; *eadem.*, 'Appunti per lo studio dell'oreficeria tardoantica e altomedievale', in Baldini Lippolis and Guaitoli (n. 4), 103–25; *eadem.*, 'Half-Crescent Earrings in Sicily and southern Italy', in F. Daim (ed.), *Splendour and Daily Life in Byzantium*, Mainz (in press).
- 6 Riemer (n. 3), 109–30, with bibliography.
- 7 Some examples in *ibid.*, 149–65 and 208–25, with bibliography.
- 8 O. Von Hessen, 'Sei linguette in ferro ageminate per cintura', in D'Angela 1988 (n. 3), 147–50.
- 9 G. V. Gentili, 'Nissoria (Enna). Reperto di oreficerie bizantine', *Notizie degli Scavi* 8 (1954), 403–5; E. Possenti, *Gli orecchini a cestello altomedievali in Italia*, Firenze, 1994, 85, no. 69; Baldini Lippolis (n. 1), 109–10, 2.II.8.b.3; 139, 2.III.1.d.7; 203, 2.VII.1.b.2; 205, 2.VII.2.b.13.
- 10 Baldini Lippolis (n. 1), 138, 2.III.1.d.1 (from Lambousa), with

- bibliography.
- 11 *Ibid.*, 138, 2.III.1.d.3–5 (from Assiūt), with bibliography.
 - 12 *Ibid.*, 136, 2.III.1.c.26, with bibliography.
 - 13 *Ibid.*, 117, pl. 50.
 - 14 Possenti (n. 9); Baldini Lippolis (n. 1), 85–7; Riemer (n. 3), 45–64.
 - 15 Gentili (n. 9), 404; Baldini Lippolis (n. 1), 192 and 205, 2.VII.2.b.13.
 - 16 The standard design depicts the bride and groom flanking either Christ, the Virgin or a cross: Baldini Lippolis (n. 1), 189.
 - 17 *Ibid.*, 203, 2.VII.b.2.
 - 18 Orsi (n. 1), 146 and 161; M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection*, Vol. II: *Jewelry, Enamels and Art of the Migration Period*, Washington DC, 1965, 68; Bonomi (n. 3), 213; C. D'Angela, 'Le oreficerie bizantine del Museo Nazionale di Taranto', *Vetera Christianorum* 21 (1984), 181–96, at 188; I. Baldini, 'Gli orecchini a corpo semilunato: classificazione tipologica. Nota preliminare', *Corso di cultura sull'arte ravennate e bizantina* 38 (1991), 67–101, at 83–4, no. 24; Baldini Lippolis (n. 1), 105, 7.b.17.
 - 19 Orsi (n. 1), 160–1; Bonomi (n. 3), 213; R. Farioli Campanati, 'La cultura artistica nelle regioni bizantine d'Italia dal VI all'XI secolo: le arti sontuarie', in G. Cavallo *et al.*, *I Bizantini in Italia*, 1982, Milan, 333–415, at 413; D'Angela (n. 18), 188; Baldini (n. 18), 84, no. 25; Baldini Lippolis (n. 1), 105, 7.b.18.
 - 20 Adamesteanu (n. 3), 272; Bonomi (n. 3), 197 and 213–4; D'Angela (n. 18), 188; Baldini (n. 18), 85, no. 27; Baldini Lippolis (n. 1), 105, 7.b.20.
 - 21 Adamesteanu (n. 3), 260 and 272; Bonomi (n. 3), 213–4; D'Angela (n. 18), 188; Baldini (n. 18), 86–7, no. 31; Baldini Lippolis (n. 1), 106, 7.b.31. A colour image of the earrings is published in www.arteomania.com.
 - 22 Orsi (n. 1), 125–6; Bonomi (n. 3), 213–14; Farioli Campanati (n. 19), 413; D'Angela (n. 18), 188; Baldini (n. 18), 91 and 93, no. 39; Baldini Lippolis (n. 1), 108, 7.c.1; Riemer (n. 3), 438.
 - 23 P. Corsi, *La spedizione italiana di Costante II*, Bologna, 1982, 161; Baldini (n. 18), 93, no. 40; Baldini Lippolis (n. 1), 108, 7.c.2. Another pair of earrings is actually in the Museum of the Palazzo Abatellis (Palermo): M. Accascina, 'L'ordinamento delle oreficerie del Museo Nazionale di Palermo', *Bollettino d'Arte* 3 (1929), 225–31, at 228–30; Baldini (n. 18), 84–5, no. 26; Baldini Lippolis (n. 1), 105, 7.b.19.
 - 24 M.R. Salvatore, *Il Museo Nazionale di Venosa*, Matera, 1991, 130–3; Lavemicocca *et al.* (n. 3); Baldini (n. 18), 25, no. 28 and 93, no. 41; G. Pacilio, *Rutigliano, S. Apollinare: una pieve longobarda?*, Bari, 1991, 12–13; Baldini Lippolis (n. 1), 106, 7.b.26 and 108, 7.c.3.
 - 25 Orsi (n. 1), 122–4.
 - 26 *Ibid.*; Baldini Lippolis (n. 1), 207, 2.VII.2.c.3.
 - 27 Orsi (n. 1), 122–4; Farioli Campanati (n. 19), 413; Baldini Lippolis (n. 1), 108, 2.II.7.c.1.
 - 28 There are nine known examples: Baldini Lippolis in Daim (n. 5).
 - 29 Baldini (n. 18); Baldini Lippolis (n. 1), 81–5; Riemer (n. 3), 67–9 and 264–6; É. Garam, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts*, Budapest, 2001, 15–20.
 - 30 The jewellery said to have been found in Mersin (Cilicia) was associated with coins ranging in date from 630–40: N. Kondakov, *Russkie Kladi. Izledovanie drevnostej velikoknjazeskago perioda*, St. Petersburg, 1896; A. Grabar, 'Un médaillon en or provenant de Mersine en Cilicie', *DOP* 6 (1951), 27–49; A. Banck, *Byzantine Art in the Collections of the USSR, Leningrad-Moscow*, 1966; Baldini Lippolis (n. 1), 38.
 - 31 E.g. Baldini Lippolis (n. 1), 145, 2.III.8.2 (Syrian); *He Kathemerine zoe sto Byzantio*, Athens, 2002, 407, no. 512.
 - 32 E.g. Baldini Lippolis (n. 1), 96, 2.III.4.f.4 (from Caesarea Maritima), with bibliography.
 - 33 *Ibid.*, 135, 2.III.2.c.12 (from Constantinople), 2.III.2.c.13 (from Lambousa, Cyprus), with bibliography.
 - 34 Baldini (n. 18); Baldini Lippolis (n. 1), 81–2 and 103.
 - 35 On this subject, in particular, see Baldini Lippolis in Daim (n. 5).
 - 36 Salvatore (n. 24), 281; Baldini Lippolis (n. 1), 100, 2.II.5d.1; 148, 2.III.10.b.5; Riemer (n. 3), 426–7.
 - 37 Some examples in Baldini Lippolis (n. 1), 148–9.
 - 38 *Ibid.*, 100, 2.II.5d.1, with bibliography.
 - 39 *Ibid.*, 164, 2.IV.4.c.1, with bibliography.
 - 40 *Ibid.*, 165, 2.IV.4.c.3, with bibliography.
 - 41 L. Breglia, *Catalogo delle oreficerie del Museo Nazionale di Napoli*, Rome, 1941, 57–8, no. 224; Baldini Lippolis (n. 1), 112, 2.II.8.d.2.
 - 42 Baldini Lippolis (n. 1), 168 and 172, 2.V.1.4–5; Riemer (n. 3), 166–9.
 - 43 Baldini Lippolis (n. 1), 172, 2.V.1.3.
 - 44 V. Bierbrauer, *Invillino-Ibligo in Friaul I. Die römische Siedlung und das spätantik-frühmittelalterliche Castrum*, Munich, 1987; Riemer (n. 3), 127; Garam (n. 29), 51–7 and 282; Corrado (n. 3).
 - 45 Baldini Lippolis (n. 1), 172, 2.V.1.1–2.
 - 46 É. Garam, 'Die awarenzeitliche Scheibenfibeln', *Communicationes Archaeologicae Hungariae* (1993), 99–134; Riemer (n. 3), 127–8.
 - 47 Baldini Lippolis (n. 1), 39, with bibliography.
 - 48 *Ibid.*, 37, with bibliography.
 - 49 *Ibid.*, 39, with bibliography.
 - 50 *Ibid.*
 - 51 *Ibid.*, 38. The circumstances of its discovery are still not clear.
 - 52 *Ibid.*, 30, with bibliography
 - 53 *Ibid.*, 34–5, with bibliography.
 - 54 M. Degani, *Il tesoro romano barbarico di Reggio Emilia*, Firenze, 1959; *I Goti*, Milan, 1994, 202–6; Baldini Lippolis (n. 1), 35; Baldini Lippolis 2008 (n. 5). A study on the treasure is due to be published in the *Varia Archaeologica Hungarica* series.
 - 55 Orsi (n. 1), 133–45; A.M. Fallico, 'Sul tesoro bizantino di Pantalica', *Sileno* 1 (1975), 311–30; Baldini Lippolis (n. 1), 39–40.
 - 56 A necklace published in 1902 (Orsi [n. 1], 139; Baldini Lippolis [n. 1], 136–7, 2.III.1.c.) and later lost, can be probably identified with a necklace with a different clasp in the Metropolitan Museum of Art, New York (collection J. Pierpont Morgan, 1944): K. Weitzmann (ed.), *Age of Spirituality. Late Antique and Early Christian Art, Third to Seventh Century*, New York, 1979, 312, no. 286; Baldini Lippolis (n. 1), 136–7, 2.III.1.c.27; also a gold bracelet from Pantalica is conserved at the Metropolitan Museum (Orsi [n. 1], 138; Baldini Lippolis [n. 1], 183, 2.VI.2.1).
 - 57 Orsi (n. 1), 137–45; Fallico (n. 55); discussion in Baldini Lippolis (n. 1), 39–40, with bibliography.
 - 58 A. Garside (ed.), *Jewelry. Ancient to Modern*, Baltimore, 1979, 152–3, no. 427; Baldini Lippolis (n. 1), 213, 2.VII.4.b.9
 - 59 Orsi (n. 1), 147–8.
 - 60 *Ibid.*, 147–8 and 230; Farioli Campanati (n. 19), 413–14, no. 222; Baldini Lippolis (n. 1), 213, 2.VII.4.b.9.
 - 61 Garside (n. 58), 152–3, no. 427; Baldini Lippolis (n. 1), 213, 2.VII.4.b.9.
 - 62 Ross (n. 18), 58–9, no. 69; Weitzmann (n. 56), 496, no. 446; E. Kitzinger, 'Christian imagery: growth and impact', in K. Weitzmann (ed.), *Age of Spirituality: A Symposium*, New York, 1980, 141–52, at 151; G. Vikan, *Byzantine pilgrimage art*, Washington DC, 1982, 43; Baldini Lippolis (n. 1), 214, 2.VII.4.b.17.
 - 63 See, for example: Kitzinger (n. 62), 151; Vikan (n. 62), 41–2; Baldini Lippolis (n. 1), 179 and 183–4, 2.VI.3.a.2.
 - 64 Baldini Lippolis (n. 1), 41; F. Maurici, *La Sicilia occidentale dalla tarda antichità alla conquista islamica. Una storia del territorio ca. 300–827 d.C.*, Palermo, 2005, 208–11. For the necklaces: Farioli Campanati (n. 19), 414–15, nos 228–9; Baldini Lippolis (n. 1), 134, 2.III.1.b.12 and 140, 2.III.2.a.6; *Pulcherrima res. Preziosi ornamenti del passato. Opere del medagliere del Museo Archeologico Regionale 'Antonio Salinas' di Palermo* (Catalogue of the Exhibition, Siena, Palazzo Squarcialupi, April 21st to November 4th, 2007), Palermo, 2007, 73–4.
 - 65 Farioli Campanati (n. 19), 414, no. 228; Baldini Lippolis (n. 1), 140, 2.III.2.a.6.

Byzantine Dress Accessories in North Africa: *Koiné* and Regionality

Christoph Eger

Byzantine dress accessories in North Africa: an ambiguous term

‘Byzantine dress accessories in North Africa’ has a twofold meaning: either dress accessories of Byzantine origin or of the Byzantine period. The two are not necessarily identical. For more than 160 years, from 533/4 until 698, North Africa was ruled by Byzantium and produced one of the most important emperors of the time, Heraclius (610–41). However, the region between *Septem* (mod. Ceuta) and the border to Cyrenaica was not one of the core regions of the Byzantine Empire, but was situated on its south-western periphery. And it did not belong to the Byzantine world from the outset: the Late Antique period in North Africa can be divided into two phases: until 429 the whole of North Africa formed part of the western half of the Roman Empire; then from 429 until 533/4 the Vandals controlled major parts of the former diocese of Africa. The geographical situation and historical development alone make quite clear that the material culture cannot have been shaped solely by eastern Mediterranean influences, but was also influenced from elsewhere.

In North Africa, as in other regions of the Byzantine Empire, supra-regional types and fashions sometimes co-existed with local traditions. In terms of provincial Byzantine archaeology, it is therefore desirable to establish a clearer regional differentiation of the find material which records the idiosyncracies of craftwork within the Byzantine Empire. Despite the still unsatisfactory state of publication this seems possible, at least for some groups of objects, amongst them belt buckles.¹ The pre-condition for this is a detailed typological and stylistic analysis, which also includes technical details as far as possible. On this basis, types and variants can be defined and their distribution patterns consequently analysed. It has long been known that the main distribution concentrations of Byzantine small finds do not necessarily indicate major market areas where production sites may be assumed. Inevitable filters for the interpretation of distribution maps are the different quality and quantity of available source material (e.g. different burial customs, which become particularly apparent in finds outside the Empire) and the widely variable state of publication in the various regions of the Mediterranean. The last is particularly true for North Africa where, hitherto, it has been impossible to obtain a clear idea of Late Antique dress accessories.

Source criticism

On many distribution maps of Late Antique metal small finds, North Africa still appears mainly as a blank. Apart from the *corpus*-like publication of bronze finds from Morocco,² there is a lack of comprehensive find-spot analyses.³ Finds of the Vandal period, which have long received special attention from Early Medieval archaeologists and which have been intensively

discussed recently,⁴ are comparatively well known. Compared with these studies, the state of publication of small finds of the Byzantine period has to be considered very poor. Essentially, one can only refer to a few pieces from *Hippo Regius* (mod. Annaba) published by Marec in 1958,⁵ and the finds from the recent excavations at Carthage supported by UNESCO. The final excavation reports of the British, American and German excavations deserve particular mention as they also included the small finds. In particular the German excavations in the coastal sector known as the ‘Quartier Magon’ unearthed a considerable spectrum of finds of Late Antique and Byzantine objects considering its relatively small surface area.⁶

Almost unknown are finds deriving from the excavations and collections of the White Fathers (Pères blancs, today: Missionari d’Africa) in Carthage over many decades. Their activities are inseparably linked with the name of Alfred-Louis Delattre, who arrived in Carthage in 1875 as a young monk and started the first excavations in the area of the basilica *extra muros* at Damous al-Karita only a few years later. For more than 50 years he actively participated in the archaeological investigation of ancient Carthage and created an impressive collection of material not only from his own excavations, but also by buying stray finds from Carthage and its environs. He made them accessible to the public in the Musée Lavigerie de Saint-Louis on the Byrsa hill. This collection formed the basis of the present-day Musée National de Carthage. Unfortunately, and quite unexpectedly given his long publication list, Delattre never wrote a line on many groups of objects including Late Antique *fibulae* and belt buckles.⁷ This may be the reason why one of the largest collections of Late Antique dress accessories of the Mediterranean has escaped scholarly attention for such a long time. The present inventory of the Musée National de Carthage includes around a dozen *fibulae* and more than 200 buckles and buckle fragments of the 5th to 7th centuries, which I have studied in the last few years as a research project devoted to Late Antique dress accessories from North Africa.⁸ Finds from eastern Algeria and western Libya, amongst them objects from *Thamugadi* (mod. Timgad), *Cuicul* (mod. Jamilah) and *Sabratha* (mod. Sabrāta), complete the find-spot spectrum. All three cities have been investigated over large areas: at Timgad, for instance, nearly all the urban areas plus a Byzantine fortress have been excavated. Mention should also be made of the huge southern necropolis with its several thousand graves that unfortunately has never been published.⁹ However, none of the afore-mentioned cities yielded nearly as many finds as Carthage.

When compared with other Late Antique cities of the Mediterranean, Carthage holds a special position. An overview of Byzantine buckles of the late 6th and 7th centuries reveals that even comparatively well known sites such as Corinth or Sardis yielded hardly more than 20 pieces respectively.¹⁰ One



Plate 1 Buckle from *Hippo Regius*/Annaba, Algeria. (scale 1:1)

Plates 2–3 Buckles of 'Syracuse' type, variants 1 and 2, Carthage (?) (scale 1:1)

must ask whether the finds in the Musée National de Carthage all come from Carthage itself or from other ancient sites in Tunisia and eastern Algeria. Although this problem cannot be dealt with in detail here, it remains to be recorded that the extraordinarily large collection of the Musée National de Carthage and some dozens of pieces from other important North African sites form a sufficient data base for the questions addressed in the introduction. Consequently both the potentials and limitations of regional differentiation will be explained by selected examples of Byzantine buckles.

Byzantine buckles of the Vandal period

It is mainly due to the existence of burials with grave goods, which are likely to be connected to the élite of Vandal and Alan society, that some examples of Mediterranean goldsmith's work of the middle and the second half of the 5th century survive. Amongst these finds are, for instance, two grave groups from *Hippo Regius* (mod. Annaba), now in the British Museum.

Of these finds I would like to argue that an oval buckle from female grave 1 is a clear example of an East Mediterranean Byzantine type (Pl. 1). The contents of this grave from *Hippo Regius* were left to the British Museum in 1865 and have only recently been discussed in detail by Quast. They include a pair of *cloisonné* disc-brooches and a gilt-bronze belt buckle with a looped belt-plate.¹¹ The latter piece consists of an oval loop of circular section, an undecorated club-shaped tongue of semi-circular section, and a kidney-shaped sheet metal plate which displays on the front a lion hunt executed in fine punch work. On the reverse the two hinge-loops turn around to the lower metal plate, which survives intact apart from minor damage on the rim and is of identical size to the upper metal plate. The belt was fixed between the two sheet metal plates by means of three laterally placed rivets with small hemispherical heads.

The piece belongs to a well-investigated type, called IV.1.B by Kazanski, Bône-Csongrád by Quast, and Bro by Schulze-Dörrlamm.¹² The buckles always consist of an oval loop, an undecorated regularly broadening club-shaped tongue, and an oval or kidney-shaped belt-plate. There are only a few differences with regard to this type such as variations in size between the upper and lower plates of the belt-plate. Whenever the reverse is illustrated, the lower plate differs from the upper one by being narrower, trapezoidal or tongue-shaped. There are only a few exceptions to this rule such as a fitting of

unknown provenance made by hollow casting and now in the collection of the Römisch-Germanisches Zentralmuseum in Mainz,¹³ and the piece presented here with an upper and lower plate of identical size. The punched or engraved ornamentation is clearly more individual and includes a wide variety of figurative motifs, as well as Greek inscriptions. Simple lion representations are found on three specimens from Syracuse-Grotticelli, Asia Minor, and another piece of unknown origin.¹⁴ They resemble each other to such a degree that they may well have come from the same workshop. No parallel, however, to the lion hunt on the Annaba buckle exists.

The origin of these buckles in the Byzantine Greek-speaking East is beyond doubt, not least because of the epigraphic pieces.¹⁵ The distribution map supports this with surprisingly clear evidence (Pl. 14). Thanks to the six specimens in the Römisch-Germanisches Zentralmuseum whose provenance is given as 'Asia Minor', one focus can be located here and another on the lower Danube river, more exactly in the Dobruja.¹⁶ Other examples have been noted in Sicily. The buckle from Annaba is the most south-western find-spot. North of the Alps, the type is completely absent, and on the middle Danube only one piece is known, from Csongrád.¹⁷

The most important circumstantial evidence for a dating exclusively in the 5th century is the presence of similarly shaped undecorated buckles of precious metals from the Merovingian Empire, which Wiczorek has dated to the middle and last third of the 5th century.¹⁸ With its large lower metal plate the buckle from *Hippo Regius* grave 1 displays a typologically early characteristic, which places the piece at the beginning of the life span of type Bône-Csongrád/Bro.¹⁹ This fits well with the dating of the pair of disc-brooches to the mid-5th century convincingly established most recently by Quast.²⁰

'Byzantine' buckles with fixed and hinged plates

By far the largest number of dress accessories from North Africa belong to the Byzantine period and specifically to the so-called Byzantine buckles with fixed or hinged plates. A refined typology for buckles with fixed plates was established by Schulze-Dörrlamm only a few years ago, and a similar one for buckles with hinged plates is in preparation by her.²¹ Schulze-Dörrlamm collected numerous parallels in order to define both the distribution and origin of the individual types.

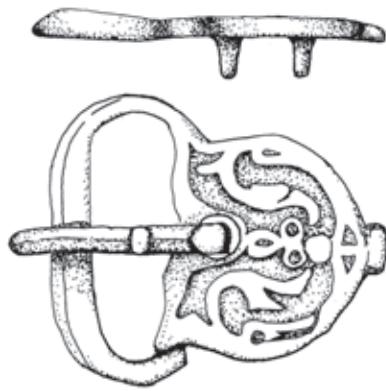


Plate 4 Buckle of 'Syracuse' type, variant 3, Carthage (?) (scale 1:1)

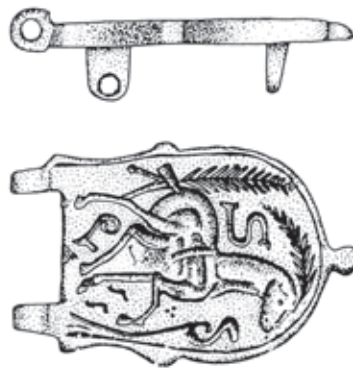


Plate 5 Buckle-plate from Carthage, Quartier Magon, Tunisia (scale 1:1)



Plate 6 Buckle-plate from Siurgus (?) (scale 1:1)

North African buckles, however, were largely unknown to her, so several of her distribution maps require amendments in this region.

Buckles of 'Syracuse' type

A type current all over the Byzantine Empire and far beyond its borders was first introduced into the scholarly literature by Werner under the type-name 'Syracuse' (Schulze-Dörrlamm's type D 12).²² The chronological framework of this buckle type has been thoroughly discussed, most recently by Riemer and Schulze-Dörrlamm. According to their analysis, these buckles can mainly be dated to the late 6th to third quarter of the 7th century.²³ With more than 40 specimens, 31 of which come from Carthage, these oval buckles with fixed sub-circular plates with inverted semi-palmettes form the second largest buckle group in North Africa.²⁴ On the basis of the North African buckles several easily distinguishable variants can be defined, three of which are discussed below (Pls 2–4).²⁵

Variant 1: On the loop, flanking the tongue-rest, punched commas are sometimes found. The decoration of the plate consists of two inverted semi-palmettes. Roundels with two double leaves are situated between the loop and the plate (Pl. 2).²⁶

Variant 2: Size and shape of the plate are identical to variant 1. 'Dot and comma' ornament is consistently found flanking the tongue-rest and on the roundels between the loop and the plate. The plate decoration consists of two narrower semi-palmettes in shallower relief; additional rudimentarily worked semi-palmettes with comma ornament exist on the internal rim side of the plate. A central ornament in the shape of a stylised flower with lateral buds is found between the semi-palmettes (Pl. 3).

Variant 3: The plate is of a broadly oval shape and there are no roundels between the loop and the plate. The relief decoration is closely related to variant 2. With only three specimens in the Museum at Carthage, this is the most infrequent of the three forms (Pl. 4).

Other buckles from Carthage are related to the 'Syracuse' type because of their similar profiles, but their decorative patterns are completely different. Buckles of the 'Syracuse' type, can be found all over the Mediterranean and in many areas on the northern periphery of the Byzantine Empire. The distribution map contains more than 75 find-spots, some of them cemeteries with several specimens (Pl. 15).²⁷ The sites

range from Sussex in southern England to the Caucasus and Sasanid Iran in the east and upper Egypt in the south. There is hardly any other type of Byzantine buckle which demonstrates mass production so clearly as the Syracuse type, although the picture is influenced by various factors: apart from the practice of burial with grave goods, the state of excavation and publication seriously obscures both the real distribution patterns and parameters of use in Late Antiquity. Thus, the great number of find-spots in the Crimea signifies both the distinctive custom of burying with grave goods practised by the population in the so-called Crimean-Gothic cemeteries, as well as the frequent importation of buckles facilitated by the immediate vicinity to Byzantine territory (here the city of Cherson and its hinterland).

The distribution of the 'Syracuse' type within the Byzantine Mediterranean must be appraised quite differently. Italy seems to represent the 'normal case'. Thanks to Riemer's study of Early Medieval graves in Italy, finds are documented more or less evenly nationwide.²⁸ Quite different is the situation in the south-east and south of the Byzantine Empire, both areas which appear almost totally to lack finds of this type. Here the situation is aggravated by the lack of both studies of old material in storerooms and of appropriate publications of small finds from recent excavations.

With the new pieces from North Africa and also a few specimens from Spain,²⁹ the south-western Mediterranean is now more clearly represented in the overall distribution of this type. The great number of pieces from Carthage is particularly notable and is likely to indicate local production. When the distribution is differentiated according to variants, the first one is by far the most frequent, also with regard to supra-regional level. Its distribution pattern largely coincides with the overall distribution. Variant 2 is clearly subordinate numerically, with about a quarter of all finds, but also possesses a supra-regional distribution hardly inferior to variant 1.

'Syracuse' buckles of variant 3 are rarer not only in Carthage, but also in general. They have a clearly different distribution, with all of the northern imperial territories and the barbarian areas beyond devoid of finds of this type. With the exception of two pieces from Italy, the few specimens are exclusively limited to the east and south of the Empire. Therefore, the workshops for variant 3 are likely to have been situated somewhere in the wide crescent between Carthage, the Levant and Asia Minor.

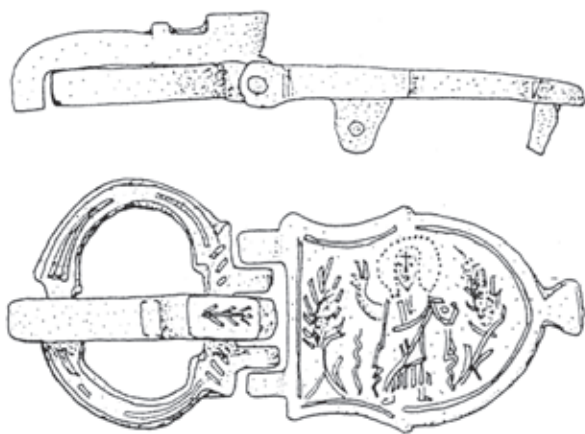


Plate 7 Buckle from Siurgus (?) (scale 1:1)

Buckles of 'Hippo Regius' type

The second type of buckle are those with a hinged plate known as the 'Hippo Regius' type. (Pl. 5). In this case the eponymous finds were several buckles found by Marec during excavations in the city area of *Hippo Regius*.³⁰ This type was dated by Riemer well into the 7th century, although it remains uncertain whether the dating of this type extends into the last third of the century.³¹ In Carthage these buckles form by far the largest group. The 57 specimens are split between half with a larger and half with a smaller variant of plate. Their characteristic features are lateral convexities and a roundish end, which give the fitting an almost horseshoe-shaped appearance.

The type belongs to those few buckles whose decoration was produced not by casting, but by engraving and punching. The iconographic repertoire includes zoomorphic and anthropomorphic representations, more rarely monograms or foliate decoration. Zoomorphic motifs are clearly dominant with more than 40 examples. Amongst the most frequently depicted animals are horses, birds and lions. Mythological animals, such as griffins and Pegasus, are also found, but are insignificant numerically. A uniform iconographic programme cannot be identified. The spectrum ranges from merely decorative images of individual animals, to secular themes such as the world of the circus, to busts of saints and the pious blessing formula of 'light and life' in monogrammatic form.

Their distribution (Pl. 16) spans almost the whole of the Mediterranean and ranges from Spain to Asia Minor and Egypt, where several specimens have only recently been published.³² On the other hand, the 'Hippo Regius' type is unknown in the Crimea and the Black Sea region.³³ Distribution patterns are concentrated, however, in Italy and Northern Africa and therefore quite clearly indicate an origin for this type in the central Mediterranean. Riemer found examples in Sardinia, but also in Sicily and northern and central Italy.³⁴ Their frequent occurrence in Carthage, in combination with a group of a dozen buckles from smaller towns on the southern fringe of the province of Numidia, such as Timgad, illustrates the particular importance of this buckle type in North Africa. An attribution to North African workshops can be assumed for this type, not only due to the large numbers found there but also because of typological and iconographic factors.

In North Africa, the images are all (with one exception) orientated parallel to the longitudinal axis of the plate. When

the buckles were worn these images were turned horizontally so that an observer could not immediately recognize the design. In Sardinia, on the contrary, several examples survive on which the image was arranged at a right angle to the longitudinal axis of the plate and would thus have been more easily visible when worn. Further examples include a plate with Daniel amongst the lions, from the province of Laerru, a plate with two females between crosses (Pl. 6), and a buckle with the figure of a blessing Christ from Siurgus (Pl. 7),³⁵ all unknown in a North African context, and which probably represent the output of an independent workshop situated in Sardinia. On the other hand, iconographic comparisons show that individual North African motifs can also be paralleled on other buckles from the Mediterranean region. Since the decoration of the plate was engraved after the initial casting, the identically executed pictures might hint at the work of one and the same – in this case North African – engraver.

Buckles with a long plate with undulating profile and buckles of 'Riva San Vitale' type

Apart from the numerous types referred to above, there are also a number of unique pieces in the collection of the Carthage Museum which are as yet unparalleled. This is the case with a bronze buckle of long shape with undulating profile and engraved with a biblical scene (Pl. 8) representing Abraham and the three angels by the oak of Mamre, a story told in Genesis 18:1–15. The iconography of this scene is well known in the early Byzantine period as is demonstrated, for instance, by a mosaic in the church of San Vitale in Ravenna. Two other buckles share the same shape, but differ in their decoration. One of them is also from Carthage and is decorated with Christ and the 12 apostles, the other of an unknown Algerian origin and now in the Musée National des Antiquités, Algiers, is undecorated. All three buckles may be dated from the mid-7th to the early 8th century due to the long narrow shape of their plates. Exact counterparts from outside Northern Africa are unknown.

Another unique piece is a gold buckle plate, broken into two pieces, which represents the only gold Byzantine dress accessory so far known from Carthage (Pl. 9).³⁶ The buckle was hollow cast and subsequently engraved and punched. With regard to its shape and decoration, it belongs to a group of buckles with hinged lyre-shaped plates which were first collected by Werner and dated to the 7th century.³⁷ Werner used the term 'lyre-shaped' for two different types of plates: on the one hand for figure-of-eight shaped belt-fittings with an integral plate, often decorated with animals and termed



Plate 8 Buckle-plate from Carthage (?) (scale 1:1)

the ‘Trebizond’ type, and on the other hand for buckles with a medallion-shaped terminal, which he discussed in connection with a buckle from Riva San Vitale, Switzerland.³⁸ Both forms are loosely related to each other and share some decorative elements such as a beaded rim, ‘dot and comma’ ornament, and decorative bosses. However, the two forms need to be differentiated because the designs of their front sides are different. Those buckles of the ‘Riva San Vitale’ type have a quadripartite field, but with two different terminals, one with a round, the other with a tear-drop shaped element. With regard to the last variant, I would draw particular attention to those examples with a combination of geometric and foliate decoration and a beaded profile, as exemplified by the belt-fitting from Carthage.³⁹ They include several gold buckles from, *inter alia*, Italy (Pl. 10), Asia Minor, and from unknown Mediterranean sites.⁴⁰ They have all come from the antiquities trade. None of the aforementioned pieces is exactly identical with the belt-fitting from Carthage. In most cases the faceted bosses, characteristic of the Carthage piece, are absent. The best parallel for the Carthaginian example is, therefore, the gilt-bronze buckle with a rounded terminal from Riva San Vitale. Similar bosses, usually spiral-shaped rather than faceted, are known from different Hispano-Roman derivatives of this type (Pl. 11).⁴¹ But these decorative bosses cannot be explained as purely western Mediterranean features. Although absent from specimens of the ‘Riva San Vitale’ type in the eastern Mediterranean, decorative bosses are not unknown

there, as indicated by a gold buckle of the ‘Trebizond’ type in a treasure from Constantinople⁴² or by a large gold cruciform buckle now in the British Museum.⁴³ Thus, the evidence seems random. Gold buckles were precious accessories, which were surely produced in very small numbers, or as individual productions. Due to their small number and widely scattered find-spots, it remains uncertain where they were made. In the literature, Constantinople is usually considered to be the origin of high-quality goldsmith’s work. However, Roth assumed that the gold buckle plate mentioned above was made in a workshop in Carthage.⁴⁴ This is certainly a possibility as Carthage, the centre of the south-western Mediterranean and the seat of a Byzantine exarch, certainly housed specialised metal workers and also goldsmiths.

Local production of dress accessories in Carthage?

An atelier for polychrome artefacts probably existed by the 5th century in Carthage.⁴⁵ This is indicated by a hoard of partly pre-cut almandine fragments in the Museum of Carthage.⁴⁶ Additionally, there is some evidence in Byzantine times for local fine metal working and goldwork in Carthage. Roth drew attention to a bronze model for forming sheet metal pectoral crosses found during the American excavations at Carthage - Dermech, which can be dated to the late 6th to 7th century because of its palmette decoration and ‘dot and comma’ ornament (Pl. 12).⁴⁷ Furthermore, there are several casting moulds in the Museum of Carthage which clearly served for

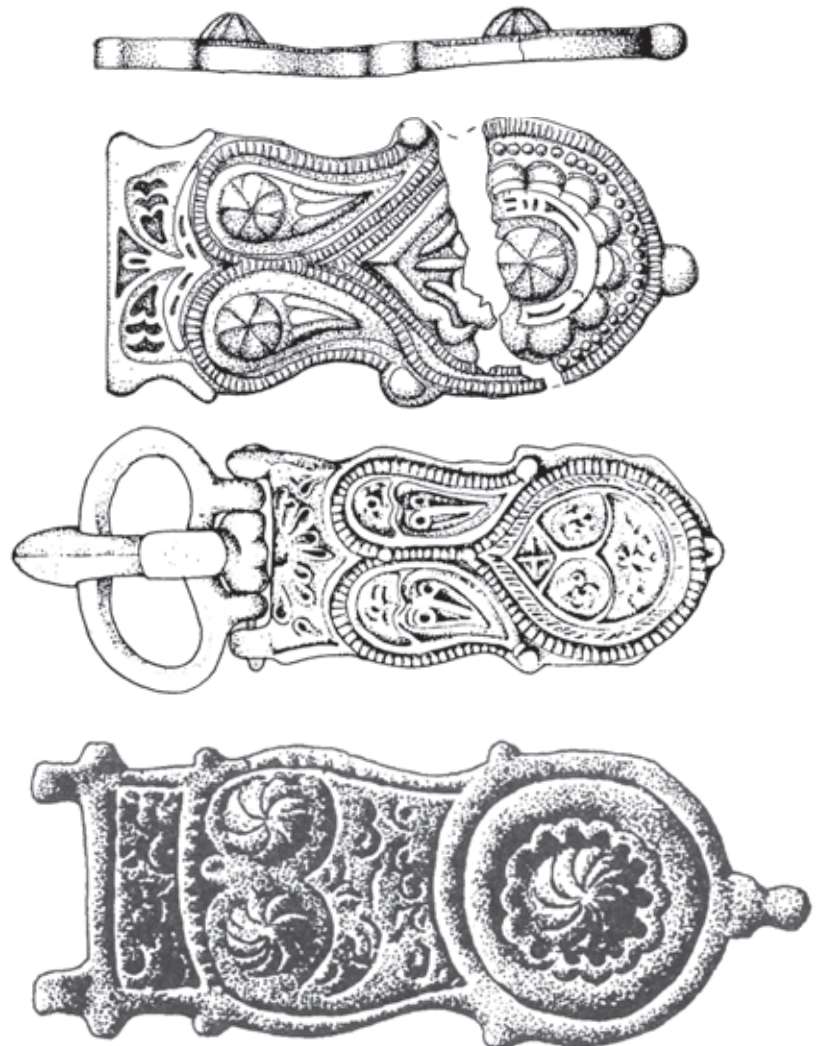


Plate 9 Buckle-plate from Carthage (?) (scale 1:1)

Plate 10 Gold buckle from unknown site, Italy (scale 1:1)

Plate 11 Buckle from unknown site, southern Spain (scale 1:1)



Plate 12 Bronze model, Carthage-Dermech, 'ecclesiastical complex' (scale 1:1)

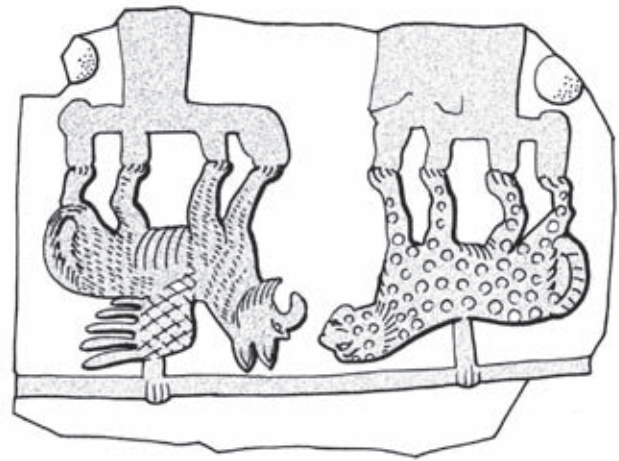


Plate 13 Casting mould, Carthage, Quartier Magon, Tunisia (scale 1:1)

the fabrication of cross pendants and small medallions with cruciform monograms. Two casting moulds found during the German excavations in room 31 of the so-called 'Quartier Magon', together with fragments of copper-alloy waste, also hint at the activity of a metalworker's workshop (Pl. 13). Unfortunately, all particulars for this workshop evidence, which is unique in Carthage so far, are lacking.⁴⁸

Proof for the local production of buckles, on the other hand, also exists. One of the very few relevant pieces is a small hinged fitting of the 'Bologna' type: it survives as a cast blank, the ridges of which have not been removed and hinge eyes and perforated studs have not yet been drilled. The piece was non-functional and likely to have been found in a metal workshop. Unfortunately, it belongs to the old finds in the Musée National de Carthage so there is neither a find-spot nor context for it, although a Carthaginian origin is not unlikely. As a fitting of the 'Bologna' type, it belongs to one of the most ubiquitous types of Byzantine buckle. It proves not only that Byzantine buckle types with a distribution pattern indicative of regional production were made locally, but also that this can be true for types with a *circum*-Mediterranean distribution.

Summary

The products of the minor arts of Late Antiquity tend to be termed 'Mediterranean' or 'Byzantine' by researchers in a general way. Nevertheless, in order to be able to describe the development of craftwork and the relationship between different regions of the Mediterranean, a stronger regional differentiation is desirable as the state of sources and publications improves. For the investigation of such questions, a sufficient data base of the relevant material is necessary. Therefore, belt buckles are a particularly suitable subject for research as many hundreds of examples of the 5th to 7th/8th centuries are now known throughout the Mediterranean. North Africa itself, however, has in the past yielded only a few finds. By the study of Late Antique dress accessories from Carthage and other North African museums this find gap has now been filled. From this rich material five types have been discussed above: one of the 5th century ('Bône-Csongrád' type) and four of the later 6th and 7th centuries ('Syracuse', 'Hippo Regius', 'Riva San Vitale' and buckles with a long fitting with undulating edges), each of which represents a different

distribution pattern. Buckles with an oval loop fitting of the 'Bône-Csongrád' type have a mostly eastern Mediterranean distribution, which only reached Sicily and sporadically North Africa. The 'Syracuse' type was presented as an example of a widely distributed type, present throughout most of the Mediterranean and far away beyond the northern imperial borders. A more detailed subdivision of the type shows, however, that less widely distributed variants occurred. With buckles of the 'Hippo Regius' type on the other hand, one sees a characteristic central Mediterranean and particularly North Africa type. The three buckles with elongated plates with undulating edges, including the buckle with Abraham, may be considered North African regional types. Because of the present state of publication, it is not always possible to specify regional attributions. This was illustrated also by the fourth type ('Riva San Vitale'), a lyre-shaped gold belt-fitting with typical Byzantine elements of shape and decoration, which is unique and has thus escaped a closer regional allocation. Still, it cannot be excluded that it was made in North Africa, possibly even in Carthage itself. Finds of casting moulds for different pieces of jewellery and the cast blank of a buckle-fitting attest to the activity of metalworkers in the North African metropolis.

The evidence provided by the examples discussed above indicates that belt buckles from North Africa of the 5th to 7th centuries include genuinely eastern Mediterranean, central Mediterranean and probably also special North African types. I have not been able to deal here with certain types present both in the central and western Mediterranean or with (north-) western Mediterranean and Pontic 'imports'. For all regional attributions one must keep in mind that we are not dealing with sharp borders. This becomes particularly clear with regard to buckles of the 'Hippo Regius' type: despite a clear concentration of find-spots in North Africa and southern Italy the overall distribution reaches very much further and selectively spans almost the entire Byzantine Empire. This makes manifold connections visible, which I would tend to explain – on the basis of the present find-spot distribution – more to personal mobility than either trade or the distribution of fashions. Buckles of the 'Syracuse' type, on the other hand, could be interpreted as an example of a 'fad', because they are spread literally all over the Mediterranean and their production was quickly adopted in many places, presumably

by passing on models and casting moulds. Although there is no space here to go any deeper into this matter, it becomes quite clear that belt buckles are ideally suited for the study of the mechanisms which lead to *koiné* and regionality in Byzantine metalwork.⁴⁹

Acknowledgements

I would like to thank Dr Janine Fries-Knoblach, Munich/Dachau, for reading and translating the manuscript from the German.

Notes

- 1 Cf. J. Drauschke, 'Zur Herkunft und Vermittlung 'byzantinischer Importe' der Merowingerzeit in Nordwesteuropa', in S. Brather (ed.), *Zwischen Spätantike und Frühmittelalter. Archäologie des 4. bis 7. Jahrhunderts im Westen* (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 57), Berlin/New York, 2008, 367–423.
- 2 Ch. Boube-Piccot, *Les bronzes antiques du Maroc IV. L'équipement militaire et l'armement*, Paris, 1994; on Late Antique dress accessories of the *Tingitana* cf. also, N. Villaverde Vega, *Tingitana en la antigüedad tardía (siglos III–VII). Autoctonía y romanidad en el extremo occidente mediterráneo*, Madrid, 2001.
- 3 But one should note the publication of Roman and Late Antique fibulae by R.R. Gerharz, 'Fibeln aus Afrika', *Saalburg Jahrbuch* 43 (1987), 77–107, and the catalogue-like publication of graves and isolated finds of the Vandal period by G.G. Koenig, 'Wandalische Grabfunde des 5. und 6. Jahrhunderts', *Madrid Mitteilungen* 22 (1981), 299–360. Both authors, however, restricted themselves to assembling published material only.
- 4 Koenig (n. 3); Ch. Eger, 'Wandalische Grabfunde aus Karthago', *Germania* 79/1 (2001), 347–90; Ch. Eger, 'Silbergeschirr und goldene Gürtel. Die vandalische Oberschicht im Spiegel der Schatz- und Grabfunde Nordafrikas', *Antike Welt* 35/2 (2004), 71–6; J. Kleemann, 'Quelques réflexions sur l'interprétation ethnique des sépultures habillées considérées comme vandales', *Antiquité Tardive* 10 (2002), 123–9; D. Quast, 'Völkerwanderungszeitliche Frauengräber aus Hippo Regius (Annaba/Bône) in Algerien', *JbRGZM* 52 [2005] (2007), 237–315; Ph. von Rummel, *Habitus Barbarus. Kleidung und Repräsentation spätantiker Eliten im 4. und 5. Jahrhundert* (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 55), Berlin/New York, 2007; Ch. Eger, 'Vandalisches Trachtzubehör? Zu Herkunft, Verbreitung und Kontext ausgewählter Fibeltypen aus Nordafrika', in G. Berndt and R. Steinacher (eds), *Das Reich der Vandalen und seine (Vor-) Geschichten* (Forschungen zur Geschichte des Mittelalters 13), Vienna, 2008, 183–95.
- 5 E. Marec, 'Hippone: Objets en bronze récemment découverts', *Libya* 6 (1958), 163–71.
- 6 Cf. M. Mackensen, 'Metallkleinfunde', in F. Rakob (ed.), *Karthago III. Die deutschen Ausgrabungen in Karthago*, Mainz, 1999, 530–44. Very few buckles were found in either of the British excavations: H.R. Hurst and S.P. Roskams, *Excavations at Carthage: The British Mission vol. 1, 1. The Avenue du Président Habib Bourguiba, Salammbô: the site and finds other than pottery*, Sheffield, 1984; H.R. Hurst, *Excavations at Carthage: The British Mission vol. 2, 1. The circular harbour, north side. The site and finds other than pottery* (with contributions by C. Duhig et. al.), Oxford, 1994.
- 7 Delattre published only three Byzantine buckles. Two of them, however, he believed to have originated in the reign of St Louis IX. This French king set off on a crusade to the Holy Land in 1270 and landed near Carthage where he died from the plague shortly afterwards (cf. A.-L. Delattre, *Souvenirs de la croisade de Saint Louis trouvés à Carthage*, Tunis, 1890).
- 8 Ch. Eger, *Spätantikes Kleidungszeug aus Nordafrika* (in preparation); Cf. provisionally, Ch. Eger, 'Boucles de ceinture de la région de Carthage datant des VI^e et VII^e siècles', *CÉDAC Carthage Bulletin* 19 (1999), 12–15.
- 9 Briefly mentioned e.g. by, Ch. Courtois, *Timgad. Antique Thamugadi*, Algiers, 1951, 66–7.
- 10 Only buckles of the late 6th and 7th century were quantified.
- 11 Quast (n. 4), 239–47.
- 12 M. Kazanski, 'Les plaques-boucles méditerranéennes des Ve–VI^e siècles', *Archéologie Médiévale* 24 (1994), 161–2: buckle with oval, respectively kidney-shaped fitting and figurative decoration.
- For buckles with epigraphic decoration: Quast (n. 4), 258–9, fig. 16, 305, find-list 1; M. Schulze-Dörrlamm, *Byzantinische Gürtelschnallen und Gürtelbeschläge im Römisch-Germanischen Zentralmuseum I. Die Schnallen ohne Beschläge, mit Laschenbeschlägen und mit festem Beschlag des 5. bis 7. Jahrhunderts* (Kataloge vor- und frühgeschichtlicher Altertümer 30), Mainz, 2002, 54–9.
- 13 Schulze-Dörrlamm (n. 12), 57, no. 51.
- 14 Koenig (n. 3), 345, fig. 18b; Schulze-Dörrlamm (n. 12), 56, no. 49; L. Wamser (ed.), *Die Welt von Byzanz – Europas östliches Erbe. Glanz, Krisen und Fortleben einer tausendjährigen Kultur*, Munich, 2004, 279, no. 437.
- 15 Quast (n. 4), 259, fig. 16 distinguished between figurative and epigraphic decoration, but found no significantly different distribution, particularly since another example with a Greek inscription from eastern Sicily has been published in the meantime (Manganaro Collection: cf. G. Manganaro, 'Arredo personale del Bizantino in Sicilia (fibbie, spille, anelli)', *Byzantino-Sicula IV. Atti del I Congresso Internazionale di Archeologia della Sicilia Bizantina*, Palermo, 2002, 506, fig. 8, 106).
- 16 Quast (n. 4), 259, fig. 16. These are to be complemented by the following examples: unknown provenance, eastern Sicily (Manganaro [n. 15], 506, fig. 8, 106, 108); Uluköy-Hoclar, Turkey (M. Lightfoot, 'Belt buckles from Amorium and in the Afyon Archaeological Museum', in C.S. Lightfoot (ed.), *Amorium Reports II. Research Papers and Technical Reports* (BAR International Series 1170), Oxford, 2003, 99, pl. VI/22); unknown provenance, environs of Mersin (?), Turkey (R. Taştekin, *Früh- und mittelbyzantinische Trachtbestandteile in der Türkei* (Unpublished Master of Arts-Thesis), Bonn, 1996, 81, pl. 11, fig. 1a–b); unknown provenance (Wamser [n. 14], 279, no. 438); Chersonese, Crimea/Ukraine, cistern P/1967 (I. Gavrituchin, 'Fibuly i remennye garnitury iz cisterny p-1967 g. v Xersonese', *Materialy po arxeologii, istorii i etnografii Tavrii* 9 (2002), 225, fig. 1, 8). With the last mentioned example, Crimea has henceforth been included into the distribution area.
- 17 D. Csallány, *Archäologische Denkmäler der Gepiden im Mitteldonaubecken (454–568 u. Z.)*, Budapest, 1961, pl. 210, 11. Cf. D. Quast, 'Byzantinisch-gepidische Kontakte nach 454 im Spiegel der Kleinfunde', in E. Istvánovits and V. Kulcsár (eds), *International Connections of the Barbarians of the Carpathian Basin in the 1st–5th centuries AD*. (Proceedings of the International Conference held in 1999 in Aszód and Nyiregyháza), Aszód and Nyiregyháza, 2001, 437.
- 18 A. Wiczorek, 'Die frühmerowingischen Phasen des Gräberfeldes von Rübenach. Mit einem Vorschlag zur chronologischen Gliederung des Belegungsareales A', *Berichte der Römisch-Germanischen Kommission* 68 (1987), 410–16. Cf. Schulze-Dörrlamm (n. 12), 56–9. Cf. also a recent find from Chersonese (Gavrituchin [n. 16], 225, fig. 1, 8) which is unlikely to be older than the late 5th century.
- 19 Cf. however, J. Kleemann, 'Rezension zu Schulze-Dörrlamm, Byzantinische Gürtelschnallen', *Ethnographisch-Archäologische Zeitschrift* 46 (2005), 117, who takes the tiny shape of the top-plate amongst other things as circumstantial evidence for an independent western production.
- 20 Quast (n. 4), 248–50.
- 21 Schulze-Dörrlamm (n. 12), 2002. See: eadem, *Byzantinische Gürtelschnallen und Gürtelbeschläge im Römisch-Germanischen Zentralmuseum II*, Mainz, forthcoming, for her analysis of pieces with hinged (moveable) plates.
- 22 J. Werner, 'Byzantinische Gürtelschnallen des 6. und 7. Jahrhunderts aus der Sammlung Diergardt', *Kölner Jahrbuch für Vor- und Frühgeschichte* 1 (1955), 36–48, at 37; Schulze-Dörrlamm (n. 12), 171–9.
- 23 Schulze-Dörrlamm (n. 12); cf. also, Ch. Eger, 'Eine byzantinische Gürtelschnalle von der Krim im Hamburger Museum für Archäologie', *Materialy po arxeologii, istorii i etnografii Tavrii* 5 (1996), 343–7. The early 6th century date is given in E. Riemer, 'Byzantinische Gürtelschnallen aus der Sammlung Diergardt im Römisch-Germanischen Museum Köln', *Kölner Jahrbuch für Vor- und Frühgeschichte* 28 (1995), 777–809, at 779, and, eadem, *Romanische Grabfunde des 5.–8. Jahrhunderts in Italien* (Internationale Archäologie 57), Rahden/Westf., 2000, 149–50, and is based on a single grave find from Sicily.
- 24 Only the 'Hippo Regius' type is more numerous, see below.
- 25 However, I have abandoned my previous typologies/variants

- as formulated in 1996 because this would imply a relative chronological typo-genesis, which cannot be proven, namely a dependence of variants 2 (termed variant 1 in 1996) and 3 on variant 1.
- 26 Variant 1 is identical with the basic type according to Eger (n. 23).
- 27 Schulze-Dörrlamm 2002 (n. 12), 176, fig. 62.
- 28 Riemer 2000 (n. 23). Riemer's study, however, was restricted to published finds.
- 29 Ceuta: Villaverde Vega (n. 2), 497, Taf. 9, PT-81; Cartagena: *La vida en Bizancio en Carthago Spartaria. Aspectos de la vida cotidiana* (5 de abril – 31 de julio 2005. Museo Arqueológico de Cartagena 'Enrique Escudero de Castro'), Cartagena, 2005, 98, no. 41.
- 30 Marec (n. 5); Riemer 1995 (n. 23), 790–1 was the first to describe the type as 'Hippo [Regius]'.
31 Cf. Riemer 1995 (n. 23), 791; Riemer 2000 (n. 23), 217–8.
32 Cf. Riemer 1995 (n. 23), 791. For examples from Egypt see: E. M. Ruprechtsberger, 'Eine byzantinische Gürtelschnalle aus Ägypten mit Inschrift und figuraler Darstellung', in U. Horak (ed.), *Realia Coptica. Festgabe zum 60. Geburtstag von H. Harrauer*, Vienna, 2001, 95; J.L. Bacharach, *Fustat Finds. Beads, Coins, Medical Instruments, Textiles and Other Artifacts from the Awad Collection*, Cairo, 2002, 201, figs 2–3.
- 33 Why Ripoll (G. Ripoll, *Toréutica de la Bética (siglos VI y VII d. C.)*, Barcelona, 1998, 187) assumed a distribution also along the Black Sea coast remains a mystery.
- 34 Riemer 2000 (n. 23), 217.
- 35 L. Pani Ermini and M. Marinone, *Catalogo dei materiali paleocristiani e altomedievali* (Museo Archeologico Nazionale di Cagliari), Rome, 1981, 114–15, nos 189–90. For a parallel for the first example, see R. Temple (ed.), *Early Christian and Byzantine Art*, London, 1990, 108, no. 77 (from Asia Minor).
- 36 W. Gernhöfer, 'Die Darstellungen der drei Männer an der Eiche von Mamre und ihre Bedeutung in der frühchristlichen Kunst, *Römische Quaralschrift* 104/1–2 (2009), 1–20.
- 37 Cf. H. Roth, 'Almandinhandel und –verarbeitung im Bereich des Mittelmeeres', *Allgemeine und vergleichende Archäologie Beiträge* 2, 1980, 330–1 (where the material is wrongly described).
- 38 Werner (n. 22), 36.
- 39 J. Werner, 'Byzantinische Gürtelschnalle aus Riva San Vitale (Kt. Tessin)', *Sibrium* 3 (1956/7), 79–84.
- 40 Individual pieces have a figurative decoration. These, and buckles with a representation of Christ derived from this type, also remain unconsidered here.
- 41 For the piece from Italy, cf. Riemer 2000 (n. 23), 219, fig. 25.
- 42 Cf. Werner (n. 39), pl. E; also Ripoll (n. 33), 157, fig. 27, 113–4.
- 43 M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection 2. Jewelry, enamels and art of the Migration Period*. With an addendum by S.A. Boyd and St. R. Zwirn, Washington DC (2nd ed.), 2005, pl. 10, 4F.
- 44 Cf. Sotheby & Co., London. Sales catalogue 18 June 1968, pl. facing 9; Schulze-Dörrlamm (n. 12), fig. 3. See also Entwistle, this volume, no. 2.
- 45 Roth (n. 37), 331.
- 46 *Ibid.*, 326–7, pls 5A–B.
- 47 *Ibid.*, 330 fig. 7, 1; cf. W.H.C. Frend and J.H. Humphrey, 'Bronze Cross and Christian Inscription', in J. H. Humphrey (ed.), *Excavations at Carthage 1976 conducted by the University of Michigan III*, Ann Arbor, 1977, 167–8, figs 1–2, who did not recognize the actual function of the Carthaginian example.
- 48 With regard to a dating in the first half of the 6th century, cf. the synoptical table by O. Teschauer in F. Rakob (ed.), *Karthago I. Die deutschen Ausgrabungen in Karthago*, Mainz, 1991, 210. However, a more detailed description and analysis of the Late Antique phases of insula E117 are lacking.
- 49 Cf. also Drauschke (n. 1), 416–22.

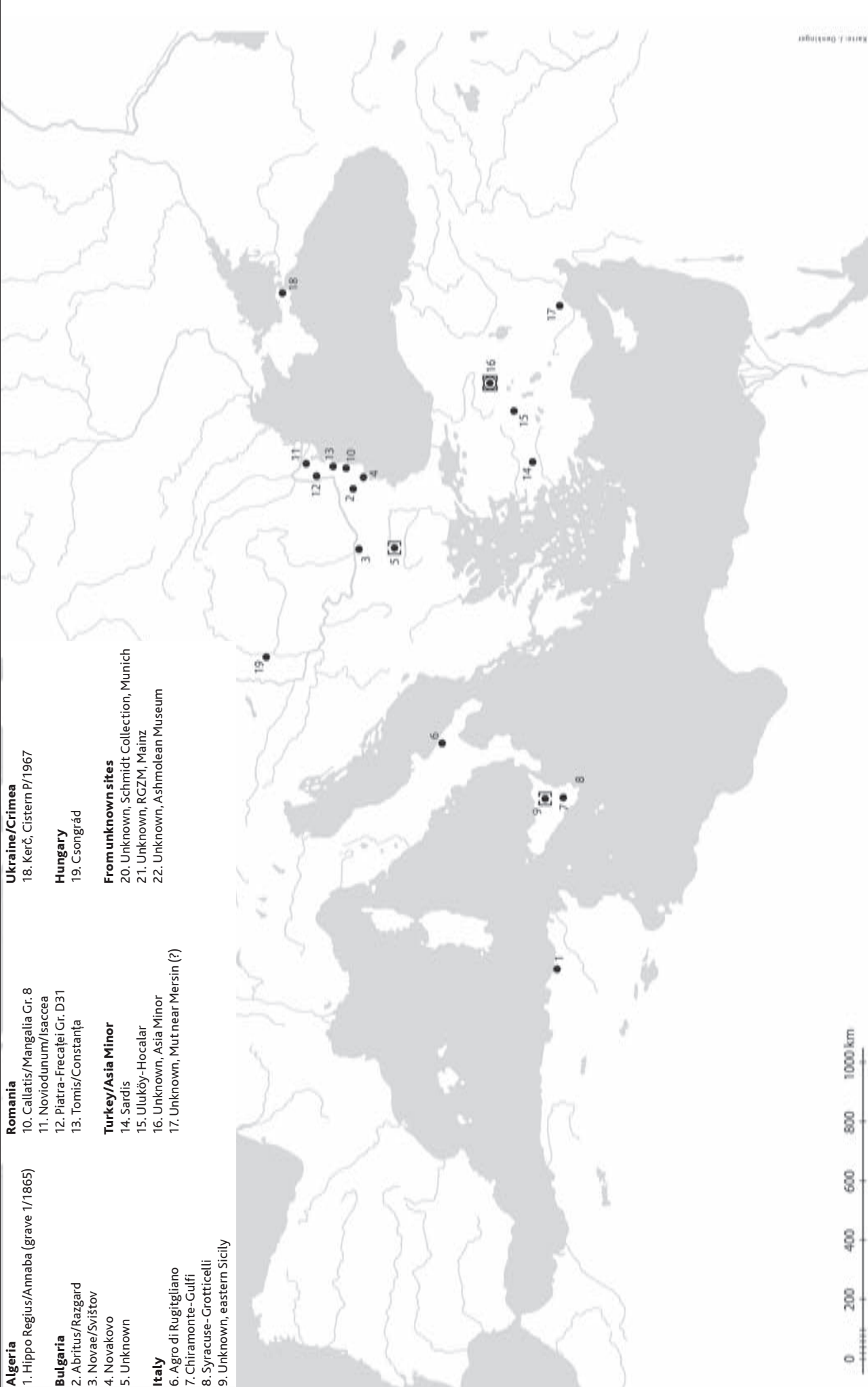


Plate 14 Distribution map of buckles of type 'Böne-Csongrád'/B10 (double circle: 5 and more examples; brackets: unknown site; number of site).

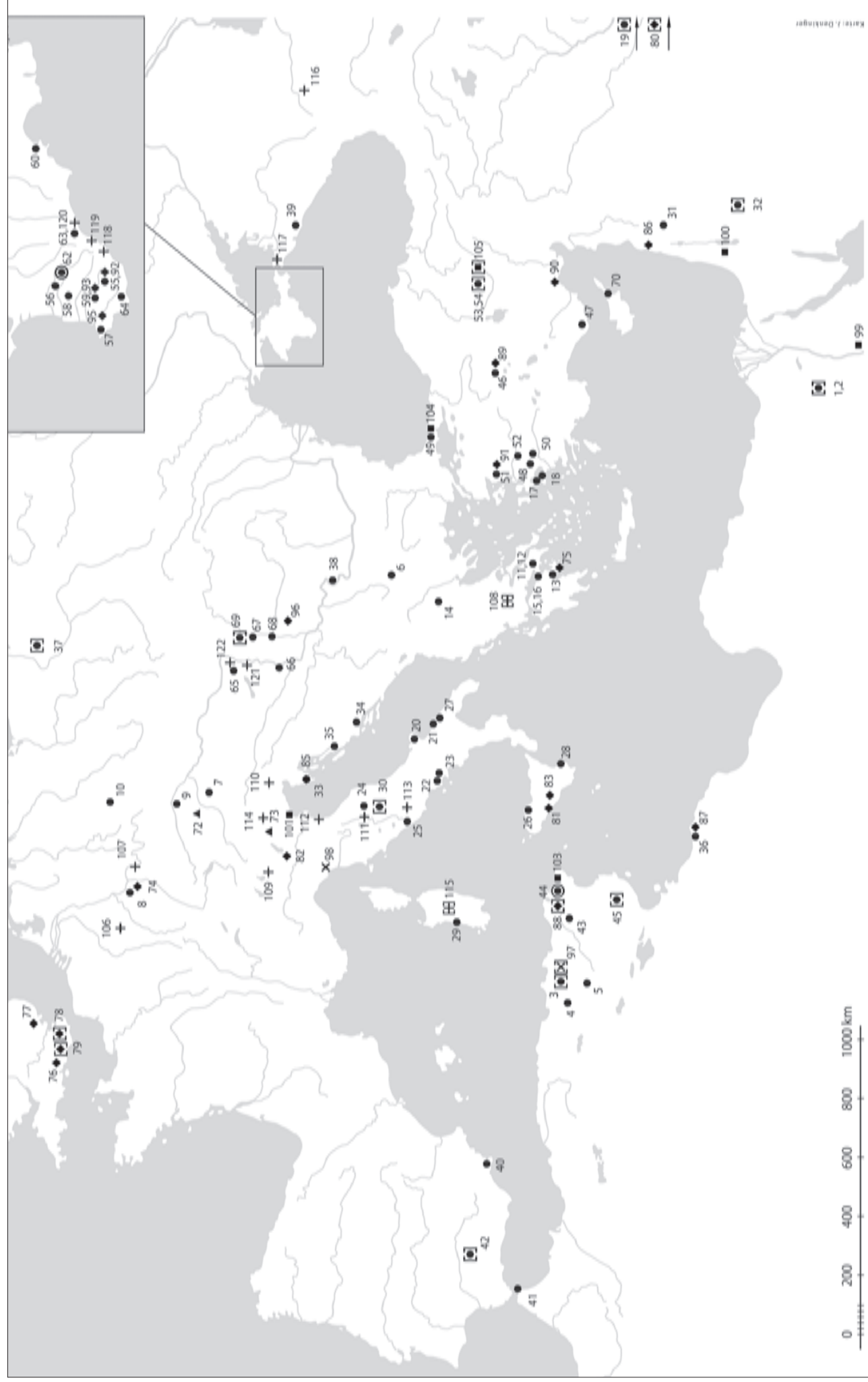


Plate 15 Distribution map of buckles of type 'Syracuse'/D12 (double symbols; 5 and more examples; brackets: unknown site; circle: variant 1; rhombic: variant 2; square: variant 3; diagonal cross: variant 4; cross: other pieces, figures missing or unknown by the author; number of sites)

VARIANT 1

Egypt

- 1. Unknown
- 2. Unknown

Algeria

- 3. Rummel valley near Constantine
- 4. Djemila
- 5. Timgad

Bulgaria

- 6. Sofia

Germany

- 7. Freilassing-Salzburghofen (grave 68)
- 8. Langenlonsheim (grave 447)
- 9. Regensburg-St. Rupert (grave)
- 10. Sömmmerda (grave 7)

Greece

- 11. Athens (Agora grave 10)
- 12. Athens (Kerameikos grave h)
- 13. Daskaleio
- 14. Edessa
- 15. Corinth
- 16. Corinth-Kraneion
- 17. Samos (Klostergut graves 2, 3, 4)
- 18. Samos (Eupalinos tunnel)

Iran

- 19. Unknown, Iran (?)

Italy

- 20. Mattinata-Stinco, Monte Sacro
- 21. Mondugno
- 22. Neapel
- 23. Unknown, near Naples
- 24. Nocera Umbra (grave 156)
- 25. Ostia, Basilica near Piana Bella (grave 21)
- 26. Piana degli Albanesi-S. Agata (grave 51)
- 27. Rutigliano (grave 6/1983-84)
- 28. Syracuse (?)
- 29. Tharros
- 30. Unknown

Jordan

- 31. Gerasa
- 32. Unknown, region of Shobeq (?)

Croatia

- 33. Pula
- 34. Salona
- 35. Zadar

Libya

- 36. Sabratha

Poland

- 37. Unknown, northern Poland (?)

Romania

- 38. Balta Verde

Russia

- 39. Boriszovo-Djurso near Novorosijsk

Spain

- 40. Cartagena (theatre)
- 41. Ceuta
- 42. Unknown, southern Spain (?)

Tunisia

- 43. Ain Wassel
- 44. Unknown, Carthage (?)
- 45. Unknown, central Tunisia

Turkey

- 46. Amorium
- 47. Anemurium
- 48. Ephesus (Hanghaus 2)
- 49. Istanbul
- 50. Nysa
- 51. Pergamon
- 52. Sardis
- 53. Unknown
- 54. Unknown, Asia Minor

Ukraine, Crimea

- 55. Aromat (graves 1 and 6)
- 56. Bakla (grave 320)
- 57. Cherson
- 58. Čufut Kale (grave 7)
- 59. Eski Kermen (grave 257)
- 60. Feodosia
- 61. Kerč
- 62. Skalistoe (graves 258, 279, 320, 471)
- 63. Suuk Su (graves 58, 157)
- 64. Usen Bash (grave 2)

Hungary

- 65. Csákberény-Orondpuszta (grave 215)
- 66. Kölked Feketekapu A (grave 325)
- 67. Szelevény
- 68. Szeged-Fehértó A (grave 34)
- 69. Unknown

Cyprus

- 70. Salamis

Of unknown origin

- 71. Northern Black Sea

LOCAL IMITATION OF VARIANT 1

Germany

- 72. Aubing (grave 167)

Italy

- 73. Aldeno

Variant 2

Germany

- 74. Hahnheim

Greece

- 75. Plateia, Argolis

Great Britain

- 76. Chichester the Broyle
- 77. Colchester
- 78. Unknown, Kent
- 79. Unknown, Sussex

Iran

- 80. Unknown, Iran (?)

Italy

- 81. Agrigent near San Leone
- 82. Calvisano-Santi di Sopra (grave Q61)
- 83. Sofiana (?), Sicily
- 84. Unknown

Croatia

- 85. Novigrad

Lebanon

- 86. Byblos or Tyros

Libya

- 87. Sabratha

Tunisia

- 88. Unknown, Carthage (?)

Turkey

- 89. Amorium
- 90. Mut near Mersin?
- 91. Pergamon

Ukraine, Crimea

- 92. Aromat (graves 1, 6)
- 93. Eski Kermen (grave 218)
- 94. Kerč
- 95. Sacharnaja Golovka (grave 5)

Hungary

- 96. Kiszombor

(Nos 97–98 see below)

VARIANT 3

Egypt

- 99. Antinoë

Israel

- 100. Beth Guvrin

Italy

- 101. Venice, lagoon
- 102. Unknown

Tunisia

- 103. Unknown, Carthage (?)

Turkey

- 104. Istanbul
- 105. Unknown, Asia Minor

VARIANT 4

Algeria

- 97. Rummel valley near Constantine

Italy

- 98. Luni

Uncertain

Belgium

- 106. Belvaux

Germany

- 107. Stockstadt

Greece

- 108. Unknown

Italy

- 109. Brianza
- 110. Cividale
- 111. Perugia
- 112. Near Ravenna
- 113. Rome
- 114. Voltago
- 115. Unknown, Sardinia

Russia

- 116. Nalčik
- 117. Taman

Ukraine, Crimea

- 118. Gursuff
- 119. Lučistoe
- 120. Suuk Su (Graves 29, 32)

Hungary

- 121. Dunapentele
- 122. Százhalombatta

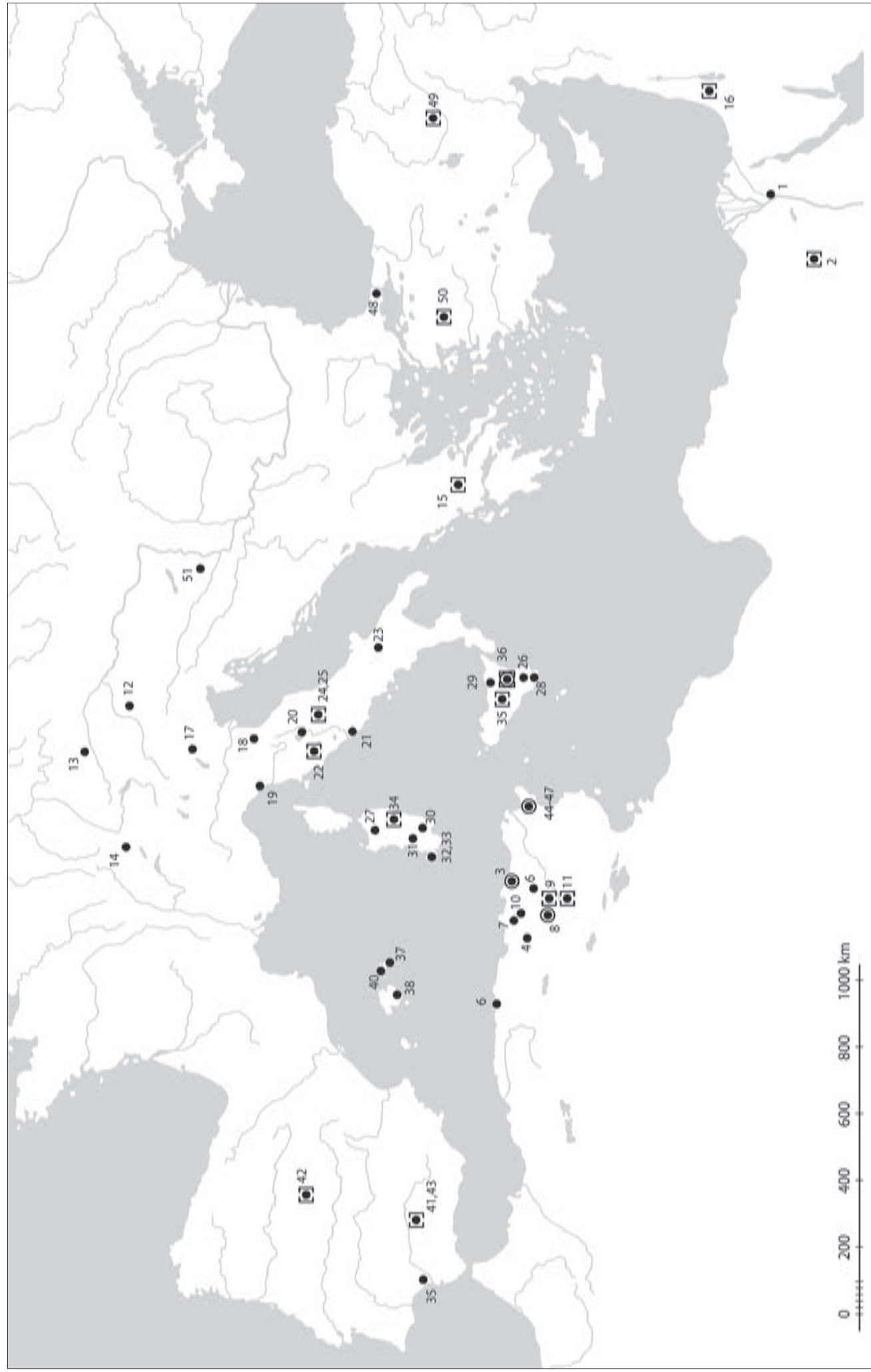


Plate 16 Distribution map of buckles of type 'Hippo Regius' (double circle: 5 and more examples; brackets: unknown site; number of site)

Egypt

- 1. Cairo-Fustat
- 2. Unknown

Algeria

- 3. Annaba
- 4. Djemila
- 5. Khemissa
- 6. Matifou
- 7. Tiddis
- 8. Timgad
- 9. Unknown, 'Numidia'
- 10. Unknown, Rummel valley near Constantine
- 11. Unknown, eastern Algeria (?)

Germany

- 12. Prien am Chiemsee
- 13. Weißenburg

France

- 14. Near Belfort

Greece

- 15. Unknown

Israel/Palestine

- 16. Unknown

Italy

- 17. Civezzano
- 18. Faenza (grave 2)
- 19. Luni
- 20. Perugia
- 21. Rome--Crypta Balbi
- 22. Unknown, Etruria
- 23. Unknown, Lavello (?)
- 24. Unknown
- 25. Unknown

Italy, Sardinia and Sicily

- 26. Canicattini
- 27. Laerru
- 28. Noto
- 29. San Marco d'Alunzio
- 30. Siurgus (?)
- 31. Siurgus Donigala-Su Nuraxi
- 32. Is Pirixeddus near Sant'Antioco
- 33. Sulcis near Sant'Antioco (?)
- 34. Unknown, Sardinia
- 35. Unknown, Sicily
- 36. Unknown, eastern Sicily

Spain

- 37. Alayor, Menorca
- 38. Castell de Santueri, Mallorca
- 39. Italica
- 40. Torre Llista Nou, Menorca
- 41. Unknown, 'Baetica'
- 42. Unknown
- 43. Unknown, Andalusia (?)

Tunisia

- 44. Carthage-Quartier Magon
- 45. Near Carthage-Byrsa
- 46. Carthage-near Kothon
- 47. Unknown, Carthage (?)

Turkey, Asia Minor

- 48. Istanbul
- 49. Unknown, Asia Minor
- 50. Unknown, western Anatolia

Hungary

- 51. Pecs

From unknown sites

- 52. Unknown, Diergardt-Collection
- 53. Unknown
- 54. Unknown, Cabinet des Médailles, Paris

Avar Goldsmiths' Work from the Perspective of Cultural History

Csanád Bálint

In memory of Hayo Vierck (1939–89) who left unfinished his research on Avar goldsmiths' work.

The archaeological legacy of the Avars¹ in the Early Middle Ages is the most splendid in the whole of Central Europe.² Exhibitions entitled 'The Gold of the Avars' and the like have attracted visitors in huge numbers throughout Europe.³ Exhibitions with a more general scope also regularly present Avar finds loaned from the museums of Hungary and Slovakia. However, if one takes a closer look at these objects, one observes that the same ones are selected again and again. It is almost the same 10–100 pieces which are requested and the greater part of them come only from the middle period (c. 600–700) of the Avar epoch (568–803). Even more typical is the preference for exhibiting objects with typological or ornamental features borrowed from Byzantine culture, although Avar culture itself has long been considered to be without any doubt one of purely eastern origin. While underlining the idiosyncrasies of Avar culture, scholars have rarely entered into a careful analysis of the analogies between Byzantine and European finds. For example, until 1963, specialists followed the classifications established by Joseph Hampel and Nándor Fettich⁴ (according to whom the early period is characterised by *repoussé* belt ornaments, the later one by cast mounts). In doing so they simply omitted the

important group of cast mounts of the early period,⁵ which are indubitably not of Eastern origin. It is therefore right to pose the following questions: how is one to consider Avar goldsmiths' work in general, how did it develop and what are its genuine characteristics?⁶

Goldsmiths' work constitutes the most characteristic part of the Avar heritage, but surprisingly, until recently its technical details have received little attention. Indeed, jewellery was always dealt with briefly in works concerned with more general topics.⁷ In any description of a typical piece of jewellery technical information was usually missing and even subsequent conservation (sometimes furnishing important information) was rarely mentioned. In their discussion of goldsmiths' work scholars used to consider only the ornamental decoration; the only exception to this prior to the last 10 years was the excellent study by Gyula László in 1940⁸ about the manufacturing process of the pseudo-buckle from Tépe (Pl. 1).⁹ (Authors of popular books on the Avars often use this to illustrate the topic of 'Avar goldsmith work'.) A generation later (1970s) Hayo Vierck intended to summarise all Early Medieval goldsmith work in Europe, in which a chapter would be dedicated to that of the Avars, but it was not finished because of his premature death.¹⁰ A generation passed and several new finds were published¹¹ before any real attention was paid to technical details. Thanks are due to Zsófia Rác,

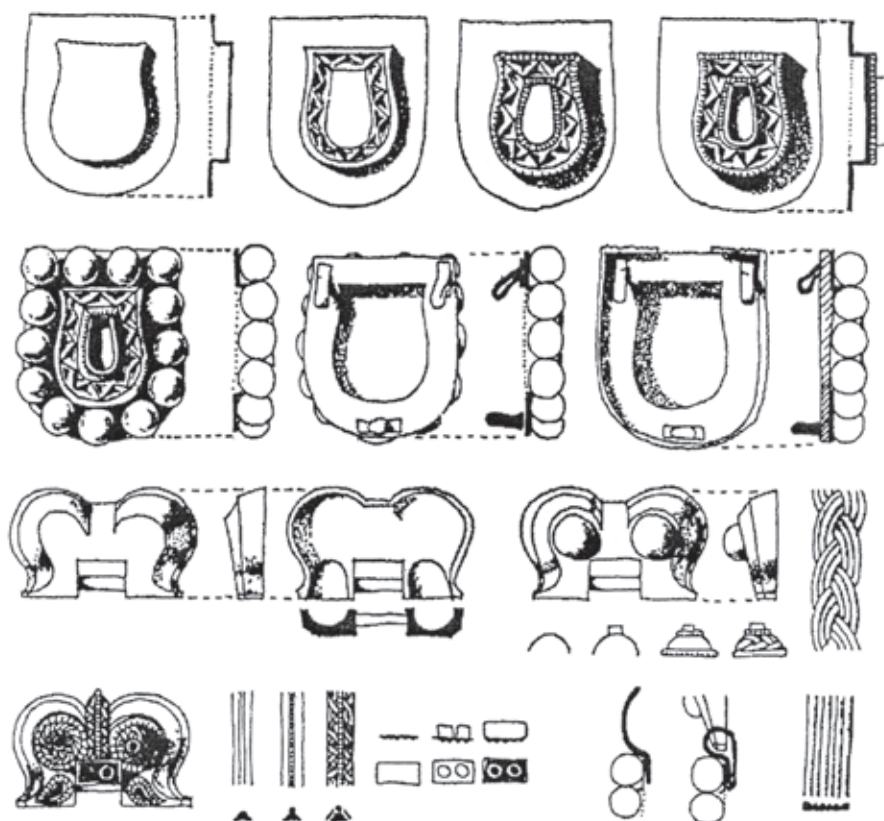


Plate 1 Construction phases of the pseudo-buckle from Tépe. See also Plate 25.



Plate 2 One gold and almandine garnet pendant from Kiskőrös-Vágóhíd

Plate 3 Gold mount with *Preßblech* imitation of granulation from Szegvár



who wrote her dissertation on Avar goldsmiths' graves,¹² to Birgit Bühler, Orsolya Heinrich-Tamácska and, more recently, Gergely Szenthe, who began real technical analyses of Avar jewellery, thus initiating new research in this area.¹³ A new picture of Avar craftsmanship is now slowly emerging.¹⁴

As with Central and Eastern European scholarship in general, archaeological research on the Avars focused to a large extent on historical problems. It became so one-sided that specialists did not realise that, by neglecting the details of goldsmiths' techniques, they were depriving themselves of important historical information. For example, the widely held opinion that the value of jewellery was primarily based on the material value of the objects themselves, is not necessarily true. In addition, few scholars take into consideration the fact that goldsmiths were held in relatively low esteem and belonged to the poorest groups of society, both in Europe and in the Orient; their wages amounted to a very low percentage of the value of their products.¹⁵ The different technologies they applied, varying in their sophistication, do not reflect 'price'¹⁶ differences between products, but merely the cultural affiliations of the goldsmiths – hence the historical relevance of the study of goldsmiths' work. However, this relevance has limitations: from a methodological point of view it would be very dangerous to draw conclusions about the social status of the buried person solely on the basis of the technical level of the grave-goods (which could have been acquired by gift, exchange or even robbery). This is a further common mistake in Central and Eastern European archaeological scholarship.

At present about 20 graves with goldsmiths' tools have been found in Avaria (some of which could have belonged to blacksmiths as well).¹⁷ Rác's forthcoming dissertation makes it clear that, even though we speak about 'graves of goldsmiths', the types and the quantity of the tools vary considerably, and a complete set has never been found in any burial. I consider the latter a warning signal that putting a given type of tool into the grave may have been just an occasional funeral custom, which symbolised the occupation of the dead. This speculation is confirmed by the fact that this custom disappeared in Avar culture in the 8th century.¹⁸ In fact graves of goldsmiths are, at present, absent in the archaeology of other peoples/cultures of Central and Eastern Europe, and on the steppe as well, despite the fact that casting moulds and dies for pressing have been found across these regions.¹⁹ This means that the custom of burying goldsmiths with some of their tools was a characteristic feature of Avar culture in its early phase, just as it was in Western and Northern Europe at this period. It is beyond my task here to analyse the possible historical or cultural reasons lying behind this situation (*i.e.* funeral customs and/or lack of specialised craftsmen?).

The well-known necklace from Kiskőrös-Vágóhíd is a good illustration of the general character of Avar goldsmiths' work in the Middle Avaric period (**Pl. 2**).²⁰ The necklace consists of five cabochon garnets alternating with six conical gold pendants. The quality of the stones and their inclusions suggests that they are almandine garnets, which in Early Medieval Europe came from India.²¹ These seven cabochon stones are perfectly cut to form a matching ensemble, which were then set by a local craftsman. Such a group could not have been assembled piece by piece as casual acquisitions and must have been very expensive in all societies, where the market value of a luxury article corresponded to its real price. The Avars could not, however, have obtained these stones in regular trade, as they were in any case reluctant to participate in it. (With the exception of the Khazars, this was in general true of other steppe peoples in the Early Middle Ages.) Consequently, it is reasonable to assume that they received the stones as tribute or acquired them as booty. This is well reflected by the great discrepancy between the actual value of the set and the very simple sling mounts (*i.e.* bands of gold hammered into a mould to create rows of ribbing).

Tools and technology

In brief, one can conclude that the die was the most commonly used tool among the Avars, but tools of every other production stage and every other branch of metalworking are represented among the grave goods.²² The *Preßblech* technique using dies is one of the simplest metalworking techniques which may explain why it was so widespread across Europe.²³ It was regularly applied by the Avars in order to imitate granulation and/or inlaid stones (**Pl. 3**). There are considerable differences in quality amongst objects produced in this way, which definitely depended on the preparation and condition of the die. (Some dies, for example, were used less than others.²⁴) It is hardly a coincidence that the most elaborate dies, in terms of the richness of their ornamental decoration and their execution, were found in the grave of a goldsmith at Kunszentmárton (**Pl. 4**),²⁵ buried with scales and *exagia*²⁶ which are indisputedly of Byzantine origin.

This was also the case with other master craftsmen and we may draw attention to a few notable examples. One may assume, for example, that the goldsmiths who manufactured the belt mount from Kunágota (**Pl. 5**), the mount from Cibakháza (**Pl. 6**)²⁷ and the discs (**Pl. 7**) and the cross from Ozora²⁸ were also trained in Byzantine techniques, because their products and the ornament on them differ in general from genuine Avar jewellery. There also can be no doubt about the Byzantine character of the die used in the production of the pendant jewels from Tiszafüred.²⁹ Other examples include the



Plate 4 Die for a strap end from the goldsmith's grave at Kunszenmárton



Plate 5 Reverse of gold belt mount from Kunágota



Plate 6 Detail of gold mount from Cibakháza



Plate 7 Gold disc from Ozora

mounts belonging to the scabbard of Bócsa (**Pl. 8**), whose sophistication suggests quite an experienced craftsman,³⁰ in contrast to the simple task of hammering the mounts of the wooden cup of Zamárdi (**Pl. 9**).³¹ These differences in the culture and quality of work demonstrate that 'Avar goldsmiths' work' is only an umbrella term as the goldsmiths themselves did not in fact constitute a discrete group in society and represent very different cultural affiliations.

Casting was another popular method which also resulted in the production of objects of widely different quality.³² It is important to note that all the cast pieces which belong to the Early Avar period seem to be alien to that which is generally understood to comprise 'typical' Avar culture. The precise origin of this technique in the 6th to 7th centuries remains unknown.³³ Earrings, pectorals and belt mounts show 'Byzantine' or 'Italian' characteristics, while cast belt sets of this period are of Germanic type or have ornamentation which

is incontestably of Germanic origin (the so-called Animal Style II; **Pl. 10**).

After the belt sets produced in the early period, the casting technique was not popular again amongst the Avars until generations later. In the Late Avar period (end of the 7th–8th century) large quantities of belt sets were produced in this way (**Pl. 11**), sometimes imitating more elaborate techniques like incrustation,³⁴ hollow beaded wire (**Pl. 12**)³⁵ or *Fuchsschwanz* design ('loop-in-loop').³⁶ It is important to note that the latter decorative techniques do not occur at all in the goldsmithing of the Late Avar period. This means that these imitations were not simply 'local solutions' by Avar goldsmiths, devised in order to copy techniques used in higher quality jewellery, but rather a distant reflection of metalwork being produced by the great civilizations. (This observation may contribute to the analysis of the question: to what extent Avar material culture was in fact a Byzantine fringe culture?)



Plate 8 Gold scabbard mount from Bócsa



Plate 9 Silver mount from the wooden cup from Zamárdi



Plate 10 Detail of strap end from Zamárdi decorated with Animal Style II



Plate 11 Copper-alloy strap end from Zamárdi

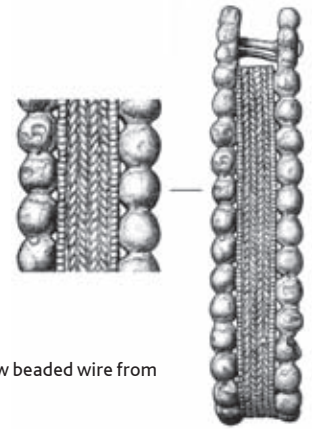


Plate 12 Strap end with imitation hollow beaded wire from Hohenberg

It is also interesting to note that there is a discrepancy in the archaeological record between the techniques and the tools used to produce them: crucibles are known from the 7th century (Csákberény grave 369, Kunszentmárton) but not from the 8th century, which proves that the placement of tools in graves was merely a funeral custom rather than a direct reflection of everyday life, as is generally supposed in Hungarian research. As for the social status of Avar goldsmiths, even if the state of research does not allow us to draw general conclusions, it is interesting to note that the two moulds (**Pl. 13**) dating to the Late Avar period were found in female burials.³⁷ Does this suggest the presence of female goldsmiths, reflect the fact that casting is a relatively basic technique, or simply indicate again that the moulds are only signs of a funeral rite? The technological level of the cast objects, which are quite characteristic of middle level technology, supports the latter argument. Primitive moulds (**Pl. 14**) and poor casts are rare exceptions; the moulds are generally carefully elaborated and there are no significant differences either in the execution of the castings or in the cold working.

More ambitious Avar goldsmiths decorated cast mounts with additional techniques in both the early and the late periods; granulation was quite rare, with punching more common. In the latter instance triangles (**Pl. 15**)³⁸ and circles³⁹ were frequently used to fill the background (the last a feature definitely derived from the Roman-Byzantine tradition), but there is a small peculiar group of belt mounts decorated with sharp pointed punches (**Pl. 16**).⁴⁰ It is indicative of the cultural background and training of Late Avar goldsmiths that the decoration of the mounts consists almost exclusively of griffins and floral ornament repeated with minimal variations.

Representations of human beings or of animals are very rare and, if they occur at all, reflect the direct influence of Late Antique and Byzantine iconography. Figural compositions also occur rarely, and scenes with humans and animals are the most uncommon of all. It is also typical that on a cast strap end one can see superbly worked floral ornament, while the figure of a mounted rider looks like a drawing made by a small child (**Pl. 17**).⁴¹ This is, quite obviously, due to the cultural background of the goldsmith. In general the representation of human beings was a rare exception on the Eurasian steppe as well. The repetition of the shape of the same type of griffins and the lack of scenic compositions reveals a level of production which does not correspond to the generally accepted meaning of the concept of 'art'.

Further information about the cultural character and quality of Avar casting comes from some metallographic analyses of Late Avar belt mounts which have yielded some astonishing results. It seems that even those mounts which belonged to the same set may have been made of different alloys.⁴² (The same also holds true for some *repoussé* mounts which have been analysed.⁴³) If this is not due to the erroneous interpretation of the few samples, instead of postmodern conclusions, one can interpret this fact in a simple way from a technological point of view. In fact the quality of a cast depends on whether the goldsmith managed to keep all the raw materials at a constant and identical temperature. The differences in the composition of the alloys may indicate that Avar goldsmiths were able to cast only small quantities at the same time. This fact also clearly indicates the general level represented by Avar goldsmith work, especially when comparing the production of their small belt fittings for

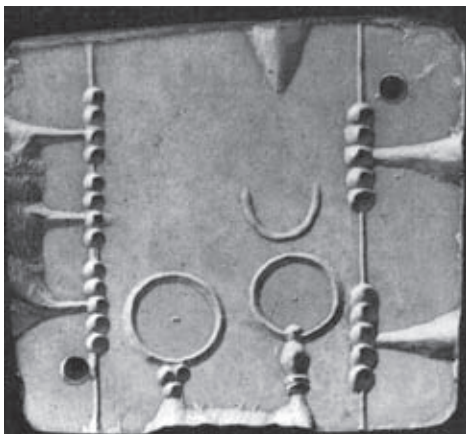


Plate 13 Stone mould from Bilisics



Plate 14 Copper-alloy mould from Zamárdi

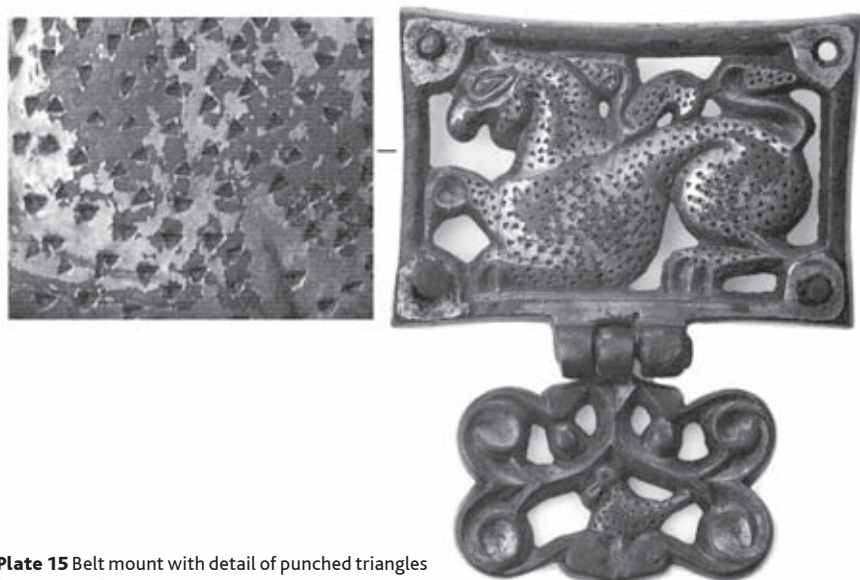


Plate 15 Belt mount with detail of punched triangles from Zamárdi



Plate 16 Gold belt mount with detail of punches from Mátészalka

example with the task of casting a statue or bell! The same picture emerges from looking at Early Avar belt mounts: in fact we are dealing with local, occasional commissions and/or local productions and most certainly not the mass products of specialised workshops.

Nothing is known about the sources of the raw material employed for the great number of bronzes in the Late Avar period. It is only an *idée gratuite*, an idea without any foundation, that ancient Roman bronze statues from the province of Pannonia were melted down for this purpose. Metallographic analyses which have been done do not at present support this idea.⁴⁴ Along similar lines, another study has considered the possibility of the early exploitation of mines in the northern Carpathians, the main source of minting and the bronze industry in medieval Hungary.⁴⁵ Specialised research is needed in order to clarify this issue as is the case with the problem of the source of the huge quantity of cast bronze jewellery produced in the Kama region in the 8th–9th centuries (a question which has not been formulated, much less addressed).

Hammering is one of the simplest and almost universal techniques employed by the goldsmith and it too was widely

used by Avar craftsmen.⁴⁶ A stone object most probably used as an anvil was found in the infill of a Late Avar house (Pl. 18),⁴⁷ and from the same period a number of hammers which could have been used by goldsmiths have also survived (Pl. 19).

According to demand and their skills, Avar goldsmiths used sheets of gold to produce the cores of *Bommelohrrings* (Pl. 20) or the whole surface of the hair clasp (Pl. 21) by *Formtreiben*.⁴⁸ Practically all of the earrings have a uniform diameter and regular shape in addition to attached pendants. These pendants have different forms: they are globular or pyramidal (Pl. 22) in the 7th century but only globular in the 8th century.⁴⁹ A considerable achievement was, of course, the manufacture of a chalice decorated with fluting (Pl. 23).⁵⁰ The cultural awareness (or rather the lack of it) of both goldsmith and patron is well illustrated by the case of a Byzantine gold plaque with a figural composition which was cut through without any respect for the original decoration in order to fit it as an ornament on an Early Avar sword (Pl. 24).⁵¹

Wire-drawing occurs too, mostly in the early period,⁵² and interestingly is not found in Eastern and south-eastern Europe in the Early Middle Ages. The spinning and twisting of ribbons or wires on Avar goldwork is likewise superior in technical



Plate 17 Detail of strap end with rider from Komárno

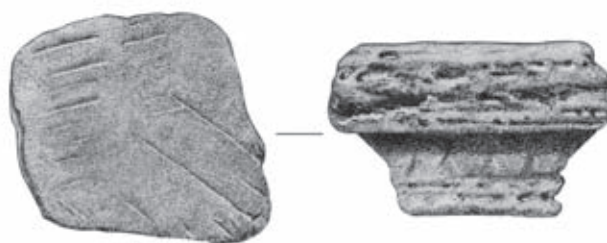


Plate 18 Stone anvil (?) from Eperjes



Plate 19 Head of a hammer from Želovce



Plate 20 Gold earrings (Bommelohrrings) from Debrecen



Plate 21 Detail of a gold hair clasp from Kiskőrös



Plate 22 Gold pyramidal earring from Deszk



Plate 23 Detail of gold chalice with fluted body from Bócsa



Plate 24 Detail of a Byzantine gold scabbard mount from Kunágota

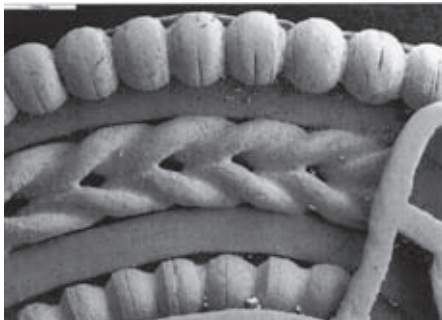


Plate 26 Detail of a clasp with Äquatorscheit



Plate 25 Gold pseudo-buckle from Tépe

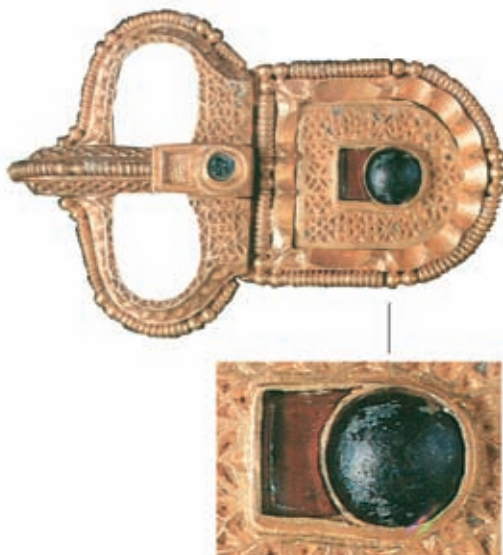


Plate 27 Gold buckle from near Sirmium



Plate 28 Detail of gold strap end from Kunbábony



Plate 29 Gold medallion from Szegvár (left); gold medallion from Ufa (right)



Plate 30 Gold and amethyst earrings from Ozora

quality to that of the goldsmiths of Eastern and Central Europe. Even more sophisticated is their use of hollow beaded wire (*Perldraht*) and loop-in-loop wire (**Pl. 25**). These occur on the finest pieces of Avar jewellery, but in order to judge them in their absolute context it is important to note that the techniques mentioned above, together with beaded wire with an embossed meridian (*Äquatorscheit*) (**Pl. 26**), do not occur on average Avar products (or on Sasanian and other Middle Asian objects), but are only to be found on genuine Byzantine products.⁵³

Inlaying with glass or stone is one of the more elaborate techniques⁵⁴ and both cabochon and plate *cloisonné* are found on Avar metalwork. Heinrich-Tamáska has defined three varieties: a German, an Eastern/Byzantine and a local one.⁵⁵ Glass inlay was, of course, less expensive than that of semi-precious stones and so was generally used, but the choice does not seem to have been determined by the price alone. If the goldsmith did not have any precious stones at hand, he simply used glass instead. This practice explains why, even in the case of the belt set (c. 550–650) found in the vicinity of Sirmium, which is one of the finest found anywhere in the Byzantine Empire, one finds only inlays of medium quality (**Pl. 27**).⁵⁶ The

same is true for the the gold strap-end from Kunbábony, the richest grave of the early period (the second third of the 7th century); it has only small translucent glass inlays and no stones at all (**Pl. 28**). On the other hand, there are cases where different kinds of semi-precious stones (tourmaline, amethyst, almandine) were used, for example in the middle of a medallion, which is, however, technically only a modest piece (**Pl. 29 left**).⁵⁷ In contrast there are excellent pieces of Byzantine jewellery where the inlays are made exclusively of glass (**Pl. 29 right**),⁵⁸ or some *pendilia* of the Middle Avar period which can match, with regard to the drilling technique and the execution of its suspension, even the finest pieces of Byzantine goldsmith's work (**Pl. 30**);⁵⁹ these are sure proof of a renewed Byzantine influence in the Middle Avar period. One can conclude that there was no direct correlation between the quality of the goldsmith's work and the value of the inlaid stone or glass.⁶⁰ Finally, a gold pyxis from the Nagyszentmiklós treasure showing Byzantine-Carolingian (?) influence from the Late Avar period is a very special case, as is the whole treasure: it is decorated with glass inlays in cells of different forms (**Pl. 31**).



Plate 31 Gold pyxis from Nagyszentmiklós (reconstruction by Franz Siegmeth)



Plate 32 Detail of earring with granulation from Zamárdi

The use of granulation⁶¹ among the Avars is also characteristic for goldsmiths of above average skill in Central and Eastern Europe.⁶² It occurs on unquestionably Avar products of the 6th and 7th centuries (Pls 32, 33) and not in the later period. It is found most conspicuously on earrings with pyramidal attachments and on a group of belt mounts. There is also pseudo-granulation, which makes use of small gilt-bronze granules, and there are even lower quality imitations, namely *repoussé* or *Perldraht*.⁶³

Tauschierung (inlaying gold, silver or copper into iron) was used as ornamentation for an important group of belt fittings in the 7th century (Pl. 34),⁶⁴ but it occurs only rarely on other objects (Pl. 35). Despite its wide diffusion it cannot be considered as a genuine Avar technique and it never occurs in the Balkans or in Eastern Europe. Its use in Byzantium, Italy, among the Franks, Alemans and Bavarians,⁶⁵ demonstrates the European connection of Avar goldsmith work.

Niello⁶⁶ is attested in a very few cases on imported objects (Pl. 36),⁶⁷ and *millefiori* glass is found only on the Byzantine gold buckle from Kunbábony (Pl. 37).⁶⁸ All these objects date to the 7th century and cannot be regarded as genuine Avar products.

Brief mention should be made here of enamel, because the well-known Carolingian period ewer from St Maurice d'Agaune has discs decorated in this technique, and according to Alföldi, they might have had some kind of Avar connection.⁶⁹ It is important to stress that there is no reason to connect these enamels with Avar goldsmith work, either typologically, technically or iconographically.⁷⁰ There are simply no Avar pieces decorated with enamel. However mention should be made of a belt-fitting which merits more attention than it has received to date. Today it is not possible to study it, but the published photograph seems to suggest that the decoration was



Plate 33 Gold belt fitting with granulation from Kunbábony

made with *Perldraht* and the background was filled with small glass pieces (Pl. 38).⁷¹

Gilding and silvering occurs throughout the Avar period,⁷² while, interestingly, tinning was employed only in the Middle and Late Avar periods.⁷³ It also merits special attention that gilded silver jewellery is found only in Pannonia and not on the Great Hungarian Plain.⁷⁴

Finally a strange, absolutely unique decorative technique cannot be omitted here. In the pierced decorative background of an 8th-century strap end the wings of an insect (*Netocia cuprea*) have been observed, which are of green colour and filled the space between the vegetal ornament.⁷⁵

Cultural lessons of the treasure of Nagyszentmiklós for Avar goldsmith's work in general

The landscape of the Avar goldsmith's work represents a kind of 'great plain' with some 'hills', where the only veritable 'peak' is the treasure of Nagyszentmiklós (Sînnicolau Mare, Rumania).⁷⁶ This is the most important treasure in the whole of Central and Eastern Europe from the Early Middle Ages and consists of 23 decorated gold vessels with a total weight of 10kg (20lb) (Pl. 39). Its connection with Avar culture of the 7th and 8th centuries is today beyond any doubt. In the present context it is interesting to note that the use of a special kind of punch forms one key argument for the Avar origin of the treasure, as it can only be paralleled on Avar belt mounts. (There are of course other arguments as well.)

Scholarly literature on the treasure is abundant, but a specialised goldsmith has dealt with it for the very first time only recently, some 200 years after its discovery.⁷⁷ It is clear, even without having a great knowledge of the goldsmith's craft, that all the vessels were produced by *repoussé* work, that nearly all of them were decorated by punching, and that some

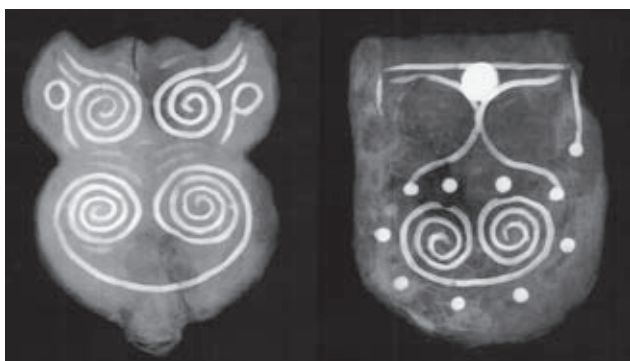


Plate 34 X-radiograph of two belt fittings with *Tauschierung* from Budakalász

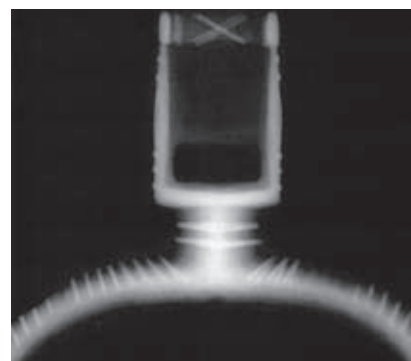


Plate 35 X-radiograph of the upper part of a stirrup with *Tauschierung* from Mikebuda



Plate 36 Detail of belt buckle with nielloed decoration from Kölked-Feketekapu B, Grave 119



Plate 37 Detail of buckle with *millefiori* glass from Kunbábony



Plate 38 Belt fitting with *Perldraht* from Želovce

of them had pierced work and glass inlays. It is very important to note the absence of filigree, granulation and niello. Both the quality of their ornamental decoration and the techniques applied confirm the impression that they are exceptional, indeed unique pieces, not only in the Carpathian Basin but in the whole of contemporary Central and Eastern Europe. This aspect alone deserves special attention and needs explanation from the point of view of cultural history.

To understand this uniqueness it is especially informative to compare this treasure with the find from Mala Pereščepino, in the region of Poltava, which is regarded as the grave of Kuvrat, the khagan of Magna Bulgaria from around 630–50.⁷⁸ The richness and importance of this find for the research of Early Medieval Central and Eastern Europe is comparable to that of Sutton Hoo in western Europe. Here I would like to mention only those objects which, from a technical viewpoint, were most probably produced locally. First of all, it is striking that they are undecorated, particularly a gold bowl of Sasanian type weighing about 1.81kg (2lb 9oz). Genuine Sasanian bowls are always decorated and made from silver. It is equally telling if we compare the armband with stone inlays (**Pl. 40 top**) with another one from the same find which is a masterpiece of Byzantine goldsmith's work (**Pl. 40 bottom**). The settings of the glass inlays are definitely inferior when compared with the workmanship of the latter piece. It is absolutely clear that raw materials such as gold and silver were readily accessible for the goldsmiths working in or for the court of this person of the highest rank. However, this ruler on the East European steppe, maybe even Kuvrat whose godfather was the Emperor Heraclius, was not able to find a local craftsman who could manufacture elaborate luxury articles decorated with the techniques regularly used in the Byzantine Empire. This is a good lesson regarding goldsmiths' work of the steppe in general. One can see the same phenomenon at the eastern end of the Eurasian steppe: the small gold vessels of the treasure of



Plate 39 Gold vessels from the Nagyszentmiklós treasure



Plate 40 Gold bracelet from Mala Perešćepino (above); detail of gold bracelet from the same find (below)

Kül tegin, the most senior counsellor in the eastern Turkish Empire in the mid-8th century, are also undecorated and, from a technical point, simply made.⁷⁹ For this reason, it is of great importance, both from the viewpoint of Avar history and European cultural history in general to understand that the craftsmen producing the vessels of the Nagyszentmiklós treasure enjoyed a higher level of training both in artistic and technical respects, when compared with their colleagues who were employed by the rulers of the European and Inner Asian steppe in the 7th–8th centuries.

What kind of conclusion can be drawn from this? Is there any find which would allow us to suppose that Avar culture attained a higher technical standard than its neighbours in the Eastern European steppe while they were living there c. 558–68, *i.e.* before the conquest of the Carpathian Basin? Their culture was not exceptional: all goldsmithing products of the Eurasian steppe have a uniformly modest character from the point of view of technique, ornament and typology. We can only conclude that it was the inherent local cultural possibilities of the Carpathian Basin which enabled the development of the material culture of both the Avars and, 200 years later, the Hungarians to reach a significantly higher level in their goldsmiths' work when compared with all their eastern counterparts on the Eurasian steppe.

There is, however, an important contradiction between the Avar origin of the Nagyszentmiklós treasure and its uniqueness among the archaeological material of the Avars. This treasure was, in my opinion, collected over one and a half centuries by an Avar ruling family, every generation of which commissioned new pieces in the authentic Avar tradition. But why are similar pieces missing from the archaeological record of the 7th–8th centuries? It is hard to believe that the craftsmen who

manufactured these vessels did not produce other similar objects.⁸⁰ Dealing with this phenomenon can help us to understand the craft of the Avar goldsmith in general. Purely theoretically, of course, one can interpret freely the episode in the *Annales Fuldenses* which describes how Eric, the duke of Friuli, took away the entire treasury of the Avar khagan in 796⁸¹ so that no vessels remained in the land. In reality we have no idea what was contained in the booty, whether there were any genuinely Avar pieces or vessels which, purely theoretically, could be compared with those ones from Nagyszentmiklós.

I propose, however, that we might resolve the contradiction between the Avar origin of this treasure on the one hand and the overall Avar archaeological material on the other from the point of view of cultural history. As the Avar economy was quite obviously not governed by the rules of a free market, we cannot suppose that there would have been established workshops continuously producing luxury items as in Early Medieval Western Europe.⁸² I suppose that each generation of the (local) dynasty who intended to add new items to the treasure of Nagyszentmiklós was always able to find highly specialised craftsmen who fulfilled only these commands. (It will most probably remain a mystery to us how they organised this selection. Maybe they used itinerant craftsmen.⁸³) The treasure of Nagyszentmiklós was made in an oriental society whose aristocracy was influenced by Byzantine culture. It represents a kind of lonely peak surrounded by the 'hills' and 'plains' of Avar goldsmith work and that of the whole of Central and Eastern Europe and the Eurasian steppe region.

Concerning the ethnic origin vs the cultural affiliation of Avar goldsmiths

A comparison with Byzantine imperial workshops can only lead one to the most simple conclusion that the techniques and the ornamental decoration of Avar products are quite distant, but basically related to Byzantine pieces. It is more relevant of course to set them in their proper geographical and cultural context, *i.e.* to compare them with the goldsmiths' products of Central and Eastern Europe. Avar goldsmith work is remarkably superior, with regards to both its quality and quantity. How does one explain this phenomenon?

One could, of course, see the reason for the relative richness of Avar goldsmithing products as the consequence of the immense quantity of gold tribute (about 6 million *solidi*) extorted from the Byzantine Empire between 574–626. The relative abundance of the raw material is not, however, sufficient explanation in itself: see the above mentioned example of the find from Mala Perešćepino. Ethnographic evidence shows, for example, that granulation is not a mysterious craft: its prerequisites are 'only' gold and know-how. Neither of them is sufficient alone, but it is also evident that the more important one is technical knowledge. Gold can be obtained quite quickly and easily by military or diplomatic means, but it is far more difficult to obtain skilled craftsmen, for the necessary know-how always supposes a certain workshop tradition. Some Eastern Slavic tribes, for example, also managed to obtain some gold during their raids on Byzantium, even if on a much more modest scale than the Avars, and the Bulgars as well could obtain gold thanks to their wars and treaties with the neighbouring Byzantine Empire. But to the east of the Carpathians and in the Balkans no pieces of

high-quality jewellery have been found which could be supposed to have been made by local craftsmen. Where did the superior know-how of the Avar goldsmith in the Carpathian Basin come from? A definite answer to this very complex and far-reaching question is actually not possible.

However there are two decisive starting points from which to advance further questions concerning the archaeology and history of the Avars. The first is the simple fact that with a single exception all goldsmiths' burials (including the dies) in the Avar khaganate can be dated only after the beginning of the 7th century,⁸⁴ *i.e.* the burials and tools appear at the same time as the acme of Avar culture. This coincidence is most certainly not a chance one. Could this mean that the goldsmiths of the Avars were of foreign origin and arrived a generation after the conquest of the Carpathian Basin? Or would they have needed about 50 years in order to acquire better technology and techniques? If so, who were their teachers? Secondly, one can see a considerable gap in technological terms between the archaeological record of Early Avar culture (6th–7th centuries) and the Late one (8th century): as previously mentioned, in the later period sophisticated techniques such as granulation and incrustation with stones or glass had disappeared. In the latter case it needs to be explained why this knowledge disappeared at the end of the 7th century.

The present state of research allows us to conclude only where the Avar goldsmiths could *not* have come from. They were not of eastern origin: there is absolutely no sign of typically Avar objects on the Eastern European steppe before the Avar conquest (568) and also no sign of them in Asia before the Avar appearance in Europe (558). Most of the techniques used by Avar goldsmiths are completely unknown on the Eurasian steppe. One can say the same about a Balkan origin: most Avar goldsmithing techniques do not occur there either. Nor were they of Lombardic or Gepid origin. Firstly, because as I have already mentioned, the niello techniques of the pre-Avar and Avar periods are different from each other; second, the material culture of the Avars did not begin to flourish immediately after they settled in the Carpathian Basin, but only one or two generations later. Any surviving Germanic goldsmiths could have begun to work immediately after 568.

What possibilities remain? Here I would like to propose one possibility which has never been taken into consideration before. It is well known that about 630 Samo, a merchant from Franconia, regularly travelled on business to the western regions of the Carpathian Basin.⁸⁵ He certainly bought slaves: but how did he pay for them and what did he give in exchange? Could some of the Merovingian-like artefacts found in the Avar khaganate be connected with Samo's activity?

There is no reason here to enter into the old-fashioned arguments as to whether Avar goldsmiths were of Byzantine origin or not.⁸⁶ It would, of course, be a mistake to see the Greek monograms on a group of 7th-century strap-ends (for example, *Arethon* on one of Kunágota-Mersin type),⁸⁷ as proof of a Byzantine origin for the goldsmiths,⁸⁸ in fact they are only proof of the Byzantine 'culture' of the given goldsmiths. As for the names and inscriptions on Avar objects, it is most instructive that when inscriptions do occur the goldsmiths used Greek and Latin letters and never runes of Turkic type. Even in the case of the treasure of Nagyszentmiklós, with

respect to the old but well-formulated dilemma as to whether its goldsmiths were Byzantines with Avar cultural knowledge or Avars experienced in Byzantine goldsmiths work,⁸⁹ it is possible to decide in favour of Byzantine cultural influence. However, the answer to this basic question may lie elsewhere by just posing another one: what are 'Avar' and 'Byzantine' as such, *i.e.* how far is it possible to differentiate the fringe cultural elements from the Late Antique and Italian contributions to the general notion of 'Byzantine culture'?⁹⁰

I have already repeatedly called attention to the fact that there is a significant difference to be observed within the archaeological record of the Carpathian Basin during the 6th–7th centuries. Finds from the territory of the former province of Pannonia are clearly more numerous, show a greater typological variety, and their ornamental decoration is more elaborate when compared with contemporary finds from the Great Hungarian Plain. Does this mean that Early Avar culture was born in the western part of the khaganate,⁹¹ or is this phenomenon a reflection of other factors, *i.e.* the presence of a tradition of skilled handicrafts and/or that of populations with higher cultural claims?

One can observe signs which favour all these possibilities. Firstly, a most interesting fact is the distribution of the bronze cauldrons of Hunnic type. They have come to light in greater numbers on the territory of former Pannonia than on the Great Hungarian Plain⁹² which was undoubtedly the typical settlement area of the Huns. Let us remember again that it requires great technical skill to cast bronze pieces of such size and weight; this might lead one to conclude that very specialised craftsmen worked in Pannonia even in the first half of the 5th century,⁹³ which is generally considered as a period of devastation after the collapse of Roman rule in the province. On the other hand we must take into consideration the ethnically rich picture of Pannonia in the 6th–7th centuries which included different groups of Germanic and Romanised origin who may have represented a large potential market.

The crucial factor evoking the richness of Avar material in Pannonia is, in my opinion, the contact of the Avars with Italy. To suppose such a connection is by no means surprising: it is an established pattern from the Neolithic age that the western part of the Carpathian Basin was always linked to Europe in north-western or south-western directions, while the eastern half was open to Eastern or south-eastern Europe. The Avars obviously established connections with Italy, as is revealed by both written sources and the archaeological record.⁹⁴ The latest research by Falko Daim has proved that the Mediterranean contacts of the Carpathian Basin were still working in the 8th century when there were motifs and techniques arriving from the Adriatic region,⁹⁵ showing that contacts with the Mediterranean/Byzantine world were not interrupted at the end of the 7th century.

However, when studying the cultural, *i.e.* vertical differentiation of the Avar archaeological material, one must not forget the aspect of its social, *i.e.* horizontally divided groups too. Scholars in Central and Eastern Europe used not to take into consideration the fact that the 'richness' of grave goods does not reflect directly and exactly the social position of the dead⁹⁶ and that many social, emotional and ritual factors could have influenced funerary rites, and consequently what was finally deposited in the grave.⁹⁷ But if we group and

categorise Avar goldsmith works, one should consider at the outset not the users of the products (the 'rich' and the 'poor'), but the masters of the latter. This is, however, a more than risky approach given two uncertainties. The first is our lack of knowledge of the circumstances under which people in the Avar khaganate obtained their jewellery (purchase [?], exchange, inheritance, robbery) – but this is only a question of the procurement not the production of goldsmiths' work which is the main focus of this paper. The second is the dearth of any information concerning how goldsmiths were organised in the political and economic structure of the Avar khaganate, a point no one has attempted to elucidate. It is absolutely evident, as has been mentioned briefly above, that Avar goldsmiths must have been divided into different ethno-cultural groups. It is much more difficult to set the question in its socio-cultural context. It is easy to differentiate between 'excellent', 'good', 'medium' and 'poor' quality products, but in trying to think scientifically we are in fact not able to connect these categories either to the cultural or social groups of Avar goldsmiths. We can only suppose that the cultural and the social aspects of the goldsmith's work may have coincided: certain ethnic-cultural groups could have had more cultivated and skilled master craftsmen than others. When one can differentiate at all it is possible to isolate three main groups: 'Byzantine' *i.e.* master craftsmen who had direct experience of working in Byzantine workshops (e.g. **Pls 25, 28, 37**); an intermediate group of goldsmiths who had partial knowledge and experience of Byzantine jewellery and culture (e.g. **Pls 8, 16, 20, 22, 38**); and finally, those goldsmiths who worked at a purely 'local' level (e.g. **Pls 3, 11, 29 left**). It is the task of future research to determine whether these 'Byzantine' goldsmiths, products and/or influences came from Italy or from the direction of the Balkans.

Conclusion

I hope to have illustrated that the majority of the techniques used by Avar goldsmiths do not differ considerably from those of their contemporary European and Byzantine cousins, even if there were both distinctive differences as well as important similarities. One idiosyncrasy, compared with Central and Eastern Europe and especially with the finds of the Eurasian steppe, is the great variety and quality of Avar jewellery. With regard to its techniques and quality, one can say that it is far superior to the locally made jewellery of the aforementioned regions. This is quite remarkable and very instructive when it comes to characterising Avar culture as such, especially when one speaks about its eastern/oriental roots. As regards Byzantium, there was never any doubt that the Avars had contacts with the Empire, which can be demonstrated in the typology and ornamentation of their material culture, as well as the goldsmiths' techniques used in Avaria. One can, therefore, safely conclude that the Avar goldsmith's craft is, in a certain sense, a Byzantine fringe culture. However its products – and its customers as well – belonged, as elsewhere in the world, to many different categories. Looking at Avar goldsmith work as a landscape one can observe certain 'hills' as regards the quality of the work and according, of course, to the social status of the given customers. These 'hills' emerge from the great 'plain' and there is actually only one true 'peak'. Taken together, this definitely represents a higher level than the

goldsmiths' work of Central and Eastern Europe in general, but even the best Avar pieces do not bear comparison with the jewellery, with its more expensive and elaborate techniques, produced in the workshops of Byzantium, Italy and the Merovingian kingdom.

When comparing the technological level of Avar goldwork in the 6th–7th centuries with that of Eastern Europe and the Balkans, some further analogies should be taken into consideration. The difference between Avar culture of the 6th–7th century and that of the 8th century is well reflected in jewellery and goldsmith techniques and has been mentioned more than once in this short paper. Earlier Hungarian research sought to explain this in the light of historical events without taking into consideration broader developments in Byzantium and Eastern Europe. It is well known that, at the turn of the 7th and 8th centuries, there was a great change in Byzantine goldsmithing as well. After the long series of masterpieces dating to the 6th and 7th centuries, jewellery and representative metal vessels disappeared across the entire Empire. I have already dealt with this change in another work, where my task was to consider only the Avars.⁹⁸ Just as it could be a mistake to interpret the change in Avar material culture after the 7th century as an isolated, particularly Avar phenomenon, it would be equally wrong to look for an explanation exclusively inside the Byzantine Empire.

In order to obtain a broader perspective it is of the utmost importance to observe that cast belt mounts similar to those of the 8th-century Avars are also found in the same period on the Eastern European steppe, in the Balkans, the Crimea, on the outskirts of the Caucasus and in the region of the Kama. (Similarities between jewellery and ceramic types can also be observed.) What can be the explanation for this phenomenon? All these regions, due to their historical and economic traditions, stood under more or less strong Byzantine influence. The scale of this influence should not be overestimated, of course, but its synchronic appearance and diffusion shows that certain material cultures in Eastern Europe of certain peoples – very different from each other from the point of view of ethnic origin and economic levels – followed these changes at the same time and in the same way. From a more general viewpoint it is important to note a common feature of the aforementioned regions: they adopted feudalism only centuries after its development in Western Europe in the 7th and 8th centuries as they did not belong to that zone of influence, but to the Byzantine one. It is, however, beyond the scope of this paper to investigate the reasons for the stagnation and the inability or lack of interest of Byzantium in promoting the wider dissemination of handicrafts and in general its passivity in the promotion of technical discoveries, which is one of the basic differences from western European feudalism in the Early Middle Ages. The Avars established a special relationship with the Byzantine Empire but they did it without neglecting the Italian and western European world. The combination of this policy with their centralised political power and their material (*i.e.* 'financial') possibilities enabled the Avars to develop a rich and very characteristic culture which can be regarded from several points of view as a Byzantine fringe culture. In order to really evaluate it on its own terms, in its geopolitical environment and in the whole of Europe in the 6th–8th centuries, one should never forget that

the great achievements of European goldsmithing in the Early Middle Ages are universally those pieces which followed, directly or indirectly, classical antique traditions or developed from them.

Notes

- 1 In this paper 'Avar' will be used as a chronological term and not in an ethnic sense.
- 2 The crafts in 9th-century Great Moravia are better known and more abundant than those of the Avars. The reason for this is direct Carolingian contact and influence (for chronological reasons this was not possible in the case of the Avars) and that centres of local political importance have been excavated there which is not the case for the Avar khaganate at present. See B. Chropovský, 'Zur Problematik der Entstehung und Entfaltung spezialisierter Handwerkszweige in Großmähren', in W. Jankuhn, W. Janssen, R. Schmiedt-Wiegand and H. Tiefenbach (eds), *Das Handwerk in vor- und frühgeschichtlicher Zeit*, II, Göttingen, 1983, 120–59; D. Bialeková, 'Stav remeslej výroby na Slovensku v 9.–11. storočí', in P. Ratkoš (ed.), *O počiatkoch slovenských dejín*, Bratislava, 1965, 81–95.
- 3 For example: G. Bott and W. Meier-Arendt (eds), *Awaren in Europa. Schätze eines asiatischen Reitervolkes 6.–8. Jh.*, Frankfurt am Main, 1985; G.C. Menis (ed.), *Gli Avari. Un popolo d'Europa* (Pubblicazioni della Deputazione di Storia Patria per il Friuli 22), Udine, 1995; E.A. Arslan and M. Buora (eds), *L'oro degli Avari. Popolo delle steppe in Europa*, Milan, 2000.
- 4 J. Hampel, *Altertümer des frühen Mittelalters in Ungarn*, II, Brunswick, 1905, 401–23.
- 5 O. Heinrich-Tamáška, 'Tier- und Zahnschnittornamentik im awarenzeitlichen Karpatenbecken', *Bericht der Römisch-Germanischen Kommission* 87 (2006), 542.
- 6 For a comparison with Early Medieval goldsmith techniques in Europe, see the general overview by J. Wolters, 'Goldschmied, Goldschmiedekunst', *Reallexikon der Germanischen Altertumskunde* 12 (1998), 362–86.
- 7 This neglect has a very long tradition in Hungary: the first author of a monograph on the treasure of Nagyszentmiklós, Joseph Hampel, wrote a book on the 23 gold vessels without any discussion of the goldsmiths' techniques employed (see n. 76).
- 8 Gy. László, 'La trouvaille de Tépe', *Archaeologiai Értesítő* 33 (1940), 77–90; *idem*, *The Art of the Migration Period*, Budapest, 1974, 77.
- 9 In the same period he studied in the Kunsthistorisches Museum, Vienna, the vessels from the treasure of Nagyszentmiklós and made several observations concerning goldsmiths' techniques. Some of his remarks have been published: see Gy. László and I. Rácz, *The treasure of Nagyszentmiklós*, Budapest, 1972.
- 10 In 1984 we had a long discussion about his manuscript 'Schmiedegräber der Awarenzeit'.
- 11 G. Kiss, 'Reitergrab 8 des awarenzeitlichen Gräberfeldes Lukácsháza-Hegyalja dűlő', *Savaria* 22/3 (1996), 107–43; L. Bende, 'Tauschierte Gürtelgarnitur im awarischen Gräberfeld von Pitvaros', *Móra Ferenc Múzeum Évkönyve* 6 (2000), 199–217; R. Müller, 'Ein streifenplattierte Gürtelgarnitur aus dem awarischen Gräberfeld von Gyenesdiás', in R. Müller, P. Straub and O. Heinrich-Tamáška, *Germanen am Plattensee* (Ausstellung im Museum für Frühgeschichte Schloss Traismauer), Traismauer, 2002, 43–5; E. Nagy, 'Iron phalerae decorated with inlay from Bóly', *Janus Pannonius Múzeum Évkönyve* 43 (1998), 103–12.
- 12 Zs. Rácz, *Goldsmiths' graves of the Avar period*, [in Hungarian] forthcoming, Diss., Budapest, 2004.
- 13 Á. Szőke, 'Verzinnungsarten in der Awarenzeit. Das Problem der Reinigung von verzinnnten Bronzegegenständen', *Móra Ferenc Múzeum Évkönyve* 1 (1995), 211–18; B. Bühler, 'Untersuchungen zu Guß, Oberflächenbearbeitung und Vergoldung an frühmittelalterlichen Bund- und Edelmetallgegenständen', *Archaeologia Austriaca* 82/3 (1998–9), 429–78; *eadem*, 'Der Scharnierbeschlag von Weiden am See und die Drahtherstellung im Frühmittelalter', in F. Daim (ed.), *Die Awaren am Rand der byzantinischen Welt* (Monographien zur Frühgeschichte und Mittelalterarchäologie 7), Innsbruck, 2000, 205–52; *eadem*, 'Technologische Untersuchungen an awarenzeitlichen Scheibenfibeln aus Keszthely (Ungarn)', *Zalai Múzeum* 11 (2002), 133–44; O. Heinrich-Tamáška, 'Bemerkungen zur Feinschmiedetechnik der Frühawarenzeit am Beispiel der zahnschnittverzierten Fundstücke', *Móra Ferenc Múzeum Évkönyve* 8 (2002), 245–82; *eadem*, 'Weitere Angaben zur Herstellungstechnik der zahnschnittverzierten Fundstücke: Die Konstruktion', *Móra Ferenc Múzeum Évkönyve* 10 (2004), 147–88; *eadem*, *Studien zu den awarenzeitlichen Tauschierarbeiten* (Monographien zur Frühgeschichte und Mittelalterarchäologie 11), Innsbruck, 2005; *eadem*, *Die Stein- und Glasinkrustationskunst des 6. und 7. Jahrhunderts im Karpatenbecken* (Monumenta Avarorum Archaeologica 8), Budapest, 2006; *eadem*, 'Avar-age technologies in the Carpathian Basin (sixth to eighth century)', in F. Curta (ed.), *The Other Europe in the Middle Ages*, Leiden and Boston, 2008, 237–61.
- 14 In any overview of the character of Avar archaeological research it is important to note that the study of the production processes of buckles and belt-fittings was initiated by Austrian and German scholars. For iron metallurgy we already have good surveys: J. Gömöri, 'Nemeskér-Type Iron Smelting Workshops from the Time of Onogur Colonization of Pannonia. Excavations in Zámárdi', in J. Gömöri (ed.), *Traditions and Innovations in the Early Medieval Iron Production*, Sopron and Somogyfajsz, 1999, 149–52; *idem*, *Az avar kori és Árpád-kori vaskohászat régészeti emlékei Pannoniában*, Sopron, 2000.
- 15 D. Claude, 'Die Handwerker der Merowingerzeit nach den erzählenden und urkundlichen Quellen', in Jahnkuhn *et al.* (n. 2), 257–8; H. Nehlsen, 'Die rechtliche und soziale Stellung der Handwerker in den germanischen Leges', in Jahnkuhn *et al.* (n. 2), 276; C. von Carnap-Bornheim, 'The Social Position of the Germanic Goldsmith AD. 0–500', in B. Magnus (ed.), *Roman Gold and the Development of the Early Germanic Kingdoms* (Konferenser, no. 51), Stockholm, 2001, 263–78. H. Roth was sceptical as he considered that it was not possible to determine the social position of goldsmiths on the basis of their grave goods, see: *Kunst und Handwerk im frühen Mittelalter. Archäologische Zeugnisse von Childerich I. bis zu Karl dem Großen*, Stuttgart, 1986, 130.
- 16 In the absence of a real regular market system it is more correct to use the term 'value', although one has to emphasise its quite subjective nature.
- 17 A. Nadj, 'Die Necropole bei Aradac aus dem frühen Mittelalter', *Rad Vojvodjanskih Muzeja* 8 (1959), 62–3; L. Madaras, 'Der awarische Friedhofsteil aus den 7.–8. Jahrhunderten in Berekfürdő', *Tisicum* 12 (2001), 174, pl. 14: 8; L. Papp, 'Der awarenzeitliche Friedhof von Bóly', *Janus Pannonius Múzeum Évkönyve* 7 (1962), 170–1, pl. V: 1–8; N. Fettich, *Das awarenzeitliche Kunstgewerbe in Ungarn* (Archaeologia Hungarica 1), Budapest, 1927, Taf. IV, V; Gátér: *ibidem*, Taf. VI: 19–24; Gy. Rhé and N. Fettich, *Jutas und Öskü. Zwei Gräberfelder aus der Völkerwanderungszeit in Ungarn* (Skythica 4), Prague, 1931, 32–3; J. Ormándy, 'Awarenzeitliche Gegenstände mit Granulationsverzierung. Goldene Ohrgehänge mit Pyramiden- und Kugelanhänger', *Móra Ferenc Múzeum Évkönyve* 1 (1995), 151–81; K. Vályi, 'Das Detail eines spätawarenzeitlichen Gräberfeldes in Szeged-Kiskundorozsma-Hármashatár', *Móra Ferenc Múzeum Évkönyve* 9 (2003), 212; Zl. Čilinská, *Kov v ranoslovanském umění*, Bratislava, 1981, 354–5; A. Kiss, *Das awarenzeitliche Gräberfeld von Kölked-Feketekapu B* (Monumenta Avarorum Archaeologica 6), Budapest, 2001, 25–6 and 332–3; D. Csallány, *Goldschmiedegrab aus der Awarenzeit von Kunszentmárton (Ungarn)*, Szentes, 1933; L. Selmeczi and L. Madaras, 'Avar and X–XIIth century Hungarian commoner graves at Rákóczi-falva', *Szolnok Megyei Múzeumok Évkönyve* (1979–1980), 146; N. Fettich, 'Symbolischer Gürtel aus der Awarenzeit - Fund von Bilisics', *Móra Ferenc Múzeum Évkönyve* (1963), 66–70; É. Garam, 'Preßmodel eines Anhängers byzantinischen Typs aus Tiszafüred', *Folia Archaeologica* 41 (1990), 73–86; S. Tettamanti, 'Awarenzeitliche Gußform aus Vác', *Archaeologiai Értesítő* 104 (1977), 79–85. Unpublished finds: Csákberény graves nos 323, 369 (information kindly supplied by the late Gy. László), Klárafalva B, grave 60 (Móra Ferenc Múzeum, Szeged), while I know the finds from Sajópetri, Zalakomár and Zámárdi graves 1623 and 1699 through the dissertation of Zs. Rácz.
- 18 See Rácz (n. 12).
- 19 J. Werner, *Slawische Bronzefiguren aus Nordgriechenland* (Abhandlungen der Deutschen Akademie der Wissenschaften zu Berlin, Klasse für Gesellschaftswissenschaften 2), Berlin, 1953; J. Korošec, 'The Depository of Bronze Matrices at Biskupija near Knin', *Starohrvatska Prosvjeta* III/6 (1958), 29–44; A. Bejan, 'Eine Werkstatt zur Metallverarbeitung in Drobeta – Turnu Severin aus dem 6. Jahrhundert u.Z.', *Acta Musei Napocensis* 13 (1976), 257–78; A. I. Ajbabin, 'O proizvodstve pojasnykh naborov v rannesrednevekovom Cherson', *Sovetskaja Archaeologija* (1982/3), 190–8; S. Vitlanov, 'Bronzmodellen-Matrizen zur Gürtel-

- verzierung aus Preslav', *Preslav* 4 (1994), 166–73.
- 20 É. Garam, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts* (Monumenta Avarorum Archaeologica 5), Budapest, 2001, Taf. XIV:2.
 - 21 For the almandine trade in Europe, see H. Roth, 'Almandinhandel und-verbreitung im Bereich des Mittelmeeres', *Beiträge zur Allgemeine und Vergleichende Archäologie* 2 (1980), 309–36; O. Kessler, 'Der spätantik-frühchristliche Handel zwischen Europa und Asien und die Bedeutung des Almandins als Fernhandelsgut', in E. Pohl, V. Recker and C. Theune (eds), *Archäologisches Zellwerk. Beiträge zur Kulturgeschichte in Europa und Asien* (Festschrift für Helmut Roth. Internationale Archäologie, Studia Honoraria 16), Rahden, 2001, 113–28.
 - 22 For a complete list see, Rácz (n. 12).
 - 23 T. Capelle and H. Vierck, 'Modell der Merowinger- und Wikingerzeit', *Frühmittelalterliche Studien* 5 (1971), 42–100; B. R. Armbruster, 'Preßblecharbeiten und Preßblechornamentik', in *Reallexikon des Germanischen Altertumskunde* 23 (2003), 409–13.
 - 24 Heinrich-Tamáška 2002 (n. 13), 252.
 - 25 See Csallány (n. 17). This find has been newly restored and will be republished as part of the project 'Goldschmiedegräber in Mitteleuropa' directed by Falko Daim.
 - 26 C. Entwistle, 'The Early Byzantine Weights from Kunszentmárton, Hungary', in Cs. Bálint (ed.), *Kontakte zwischen dem Balkan und dem Karpatenbecken* (Varia Archaeologica Hungarica), in press; see also the paper by B. Tobias, 'Byzantinische Gewichte im awarenzeitlichen Karpatenbecken', given at the conference 'Byzantium, Italy and Central Europe in the Early Middle Ages', in Rome, October, 2008.
 - 27 Arslan and Buora (n. 3), 74–5, cat. no. 94.
 - 28 Garam (n. 20), Taf. XV: 1, XIX: 3.
 - 29 *Ibid.*, Taf. XXXVI, for other models.
 - 30 Arslan and Buora (n. 3), 68, cat. no. 70c.
 - 31 *Ibid.*, 129, cat. no. 182, 193.
 - 32 On Avar casting in general, see Bühler 1998–9 (n. 13), 429–42; Heinrich-Tamáška 2002 (n. 13), 247–50.
 - 33 Heinrich-Tamáška 2002 (n. 13), 242, 249.
 - 34 Arslan and Buora (n. 3), 61, cat. no. 36.
 - 35 Garam (n. 20), Taf. XXXV: 1: middle.
 - 36 Bühler 2000 (n. 13), 241, Abb. 22.
 - 37 Tettamanti (n. 17); *idem*, *Das awarenzeitliche Gräberfeld in Vác-Kavicsbánya* (Monumenta Avarorum Archaeologica 4), Budapest, 2000, Taf. 39; for Bilisics, see Feticch (n. 17). For a stray find made of bronze, see P. Medgyesi, 'Ein spätawarischer Gegenstand aus Bronze gefunden in der Gemarkung von Békéscsaba', *A Wosinszky Mór Múzeum Évkönyve* 23 (2001), 247–59.
 - 38 Menis (n. 3), 174.
 - 39 *Ibid.*, 182.
 - 40 Cs. Bálint, *The Treasure of Nagyszentmiklós* (Varia Archaeologica Hungarica 16a), Budapest, 2004, 433, pl. 187 (in Hungarian with a German edition in press).
 - 41 *Ibid.*, 516–19, figs 251–4.
 - 42 L. Költő, 'X-ray Emission Analysis for Bronze objects from the Avar age', *Somogyi Múzeumok Közleményei* 5 (1982), 5–67.
 - 43 My thanks to L. Költő (pers. comm.) for this information.
 - 44 See Költő (n. 42).
 - 45 J. Werner, *Der Schatzfund von Vrap in Albanien. Beiträge zur Archäologie der Awarenzeit im mittleren Donauraum* (Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Denkschriften 184, Studien 2), Vienna, 1986.
 - 46 Bühler 2000 (n. 13).
 - 47 Cs. Bálint, *Die spätawarenzeitliche Siedlung von Eperjes, Kom. Csongrád* (Varia Archaeologica Hungarica 4), Budapest, 1991, Taf. XXX: 12.
 - 48 Arslan and Buora (n. 3), 14–15, cat. nos 12–16; 54, cat. no. 98.
 - 49 For the general typology: Zl. Čilinská, 'Frauens Schmuck im 7.–8. Jahrhundert im Karpatenbecken', *Slovenská Archeológia* 23 (1975), 63–95.
 - 50 Menis (n. 3), 200.
 - 51 Arslan and Buora (n. 3), 60, cat. no. 37.
 - 52 For a general view, see A. Oddy, 'The production of gold wire in Antiquity. Hand-making methods before the introduction of the draw-plate', *Gold Bulletin* 10 (1977), 79–87; B. Armbruster, 'Traditionelles Goldschmiedehandwerk in Westafrika und bronzezeitliche Metallverarbeitung in Europe. Technologien im ethnoarchäologischen Vergleich', *Beiträge zur Allgemeine und Vergleichende Archäologie* 15 (1995), III–201.
 - 53 Bühler 2000 (n. 13), 235, Abb. 15.
 - 54 T. Jülich, 'Zur Verwendung von Edelsteinen im Mittelalter', in S. Ebert-Schifferer and M. Harms (eds), *Faszination Edelstein: aus den Schatzkammern der Welt*, Darmstadt, 1993, 60–9.
 - 55 Heinrich-Tamáška 2006 (n. 13).
 - 56 *Ibid.*, 213, Abb. 37–8.
 - 57 Arslan and Buora (n. 3), 73, cat. no. 90.
 - 58 Courtesy of the Museum of Archaeology and Ethnography, Ufa (Bashkiria), through the kind mediation of V. A. Ivanov.
 - 59 Arslan and Buora (n. 3), 72, cat. no. 92.
 - 60 The author can not forget his astonishment when seeing the cross of the Emperor Justin II in the Treasury of St Peter's, Rome: the quality of its stone inlays does not correspond to our general idea about Byzantine imperial workshops; for example, compare with that of the pectoral from Assiût (see the latest study by Y. Stolz, 'Eine kaiserliche Insignie? Der Juwelenkragen aus dem sog. Schatzfund von Assiût', *JbRGZM* 53 (2006), 521–603). C. Belting-Ihm is probably right in considering the cross to have been the local product of an Italian workshop rather than emanating from Constantinople: *eadem.*, 'Das Justinuskreuz in der Schatzkammer der Peterskirche zu Rom', *JbRGZM* 12 (1965), 142–66; for an analytical drawing of the inlay see Stolz, *ibid.*, 535, pl. 4.
 - 61 J. Wolters, *Die Granulation: Geschichte und Technik einer alten Goldschmiedekunst*, Munich, 1986.
 - 62 See Ormándy (n. 17).
 - 63 Heinrich-Tamáška 2002 (n. 13), 259.
 - 64 M. Martin, 'Zu den tauschierten Gürtelgarnituren und Gürtelteilen der Männergräber von Kölked-Feketekapu A', in A. Kiss, *Das awarenzeitlich gepidische Gräberfeld von Kölked-Feketekapu A*. (Studien zur Archäologie der Awaren 5), Innsbruck, 1996, 345–61.
 - 65 J. Wolters, 'Ziertechniken. (Tauschierung)', *Reallexikon der Germanischen Altertumskunde* 34 (2007), 537–61.
 - 66 J. Wolters, 'Niello', *Lexikon des Mittelalters* 6 (1993), 1145; A. Bossellmann, 'Niello', *Reallexikon zur Byzantinischen Kunst* 6 (2005), 965–76.
 - 67 Kiss (n. 64), 270–6; Heinrich-Tamáška 2002 (n. 13), 261, is undecided as to whether it was an import or local production.
 - 68 Menis (n. 3), 12.
 - 69 A. Alföldi, 'Die Goldkanne von St-Maurice d'Agaune', *Zeitschrift für Schweizerische Archäologie und Kunstgeschichte* 10 (1948/49), 1–27.
 - 70 Cs. Bálint, 'A note on the research on the ewer with enamel plaques of St Maurice d'Agaune', *Acta Archaeologica Academiae Scientiarum Hungaricae* 57 (2006), 281–9.
 - 71 Čilinská (n. 17), 42.
 - 72 W.A. Oddy, 'Gilding and Tinning in Anglo-Saxon England', in W.A. Oddy (ed.), *Aspects of Early Metallurgy* (British Museum Occasional Paper 17), London, 1980, 129–31; Heinrich-Tamáška 2004 (n. 13), 259–60.
 - 73 Költő (n. 42); Szőke (n. 13).
 - 74 Heinrich-Tamáška 2002 (n. 13), 259.
 - 75 L. Vámosi, 'Another thing of interest from the Avar cemetery in Mátzár', *Műtárgyvédelem* 27 (2000), 65–8 (in Hungarian).
 - 76 Monographs: J. Hampel, *Der Goldfund von Nagy-Szent-Miklós sogenannter 'Schatz des Attila'*, Budapest, 1885; N. Mavrodinov, *Le trésor protobulgare de Nagyszentmiklós* (Archaeologia Hungarica 29), Budapest, 1943; László and Rácz (n. 9). For the abundant literature on the treasure, see Bálint (n. 40).
 - 77 The observations made by Victor Freiberg and Birgit Bühler (Vienna) will be published soon; my thanks to Falko Daim for this information.
 - 78 J. Werner, *Der Grabfund von Malaja Pereščepina und Kuvrat, Kagan der Bulgaren*, (Bayerische Akademie der Wissenschaften, Philologisch-Historische Klasse, Abhandlungen, Neue Folge 91), Munich, 1984; Cs. Bálint, 'Zur Identifizierung des Grabes von Kuvrat', *Acta Archaeologica Academiae Scientiarum Hungaricae* 36 (1984), 262–9; V.N. Zaleskaja, Z.A. L'vova, B.I. Maršak, I.V. Sokolova and N.A. Fonjakova, *Sokrovišča čana Kubrata*, St Petersburg, 1997. Russian research has always opposed Werner's interpretation: see recently, M.B. Shchukin, 'Avars, Bulgars and the treasure from the village of Malaya Pereshchepina', in W. Menghin (ed.), *The Merovingian Period. Europe without Borders*, Berlin, 2007, 84–93.
 - 79 D. Bayer, 'Gedenkstätten und Steinskulpturen der Alttürkischen Zeit', in *Dschingis Khan und seine Erben. Das Weltreich der Mongolen. Katalogbuch zur Ausstellung (Gebundene Ausgabe)*, Bonn and Munich, 2005, 78, no. 51.

- 80 The belt fitting from Kiskundorozsma and its technical analysis (see Daim, this volume) offers a completely new basis for the future study of this problem.
- 81 For the most informative paper on this issue, see M. Hardt, 'Nomadische Gier nach Gold: Jahrgelder, Burgundenuntergang und Awarenschatz vor dem Hintergrund einer mobilen Lebensweise', in A. Weiß (ed.), *Der imaginierte Nomade* (Nomaden und Sesshafte 8), Wiesbaden, 2007, 105–19.
- 82 B. Arrhenius, 'Why the king needed his own goldsmith', *Laborativ Arkeologi* 10–11 (1998), 109–11.
- 83 For itinerant craftsmen, see J. Werner, 'Zur Verbreitung frühgeschichtlicher Metallarbeiten. (Werkstatt, Wanderhandwerk, Handel, Familienverbindung)', *Early Medieval Studies* 1 (1970), 65–92; Claude (n. 15), 242–7.
- 84 Rácz (n. 12).
- 85 W. Pohl, *Die Awaren. Ein Steppenvolk in Mitteleuropa 567–822 n. Chr.*, Munich, 1988, 256–61.
- 86 Gy. László meant that if they had been of Byzantine origin, this goldsmith should have been buried in a Christian fashion (?): see *idem*, *The Art of the Migration Period*, Budapest, 1974, 78. H. Vierck considered them as having come from the Balkan provinces of the Empire (pers. comm., 1971). I. Bóna did not consider Avar culture to be a variant of Byzantine culture: see *idem*, 'Die Geschichte der Awaren im Lichte der archäologischen Quellen', in *Popoli delle steppe: Unni, Avari, Ungari*, (Settimane del Centro Italiano sull'Alto Medioevo 35), Spoleto, 1988, 447–8.
- 87 Cs. Bálint, 'Probleme der archäologischen Forschung zur awarischen Landnahme', *Vorträge und Forschungen* 41 (1993), 263.
- 88 W.A. von Jenny, 'Ein frühbyzantinisches Preßmodell aus Kleinasien', *Prähistorische Zeitschrift* 24 (1933), 298.
- 89 A. Riegl and E.H. Zimmermann, *Kunstgewerbe des frühen Mittelalters*, II, Vienna, 1923, 106.
- 90 Cs. Bálint, 'Some Avar and Balkan Connections of the Vrap Treasure', in K.R. Brown, D. Kidd and Ch.T. Little (eds), *From Attila to Charlemagne. Arts of the Early Medieval Period in The Metropolitan Museum of Art*, New York, 2000, 187. Today it is no longer futile to study this basic question, not merely because there are new finds, but thanks to the new approaches of F. Daim, J. Drauschke and younger scholars in Hungary.
- 91 I wrote for the first time about this possibility in Bálint (n. 40), 244–6.
- 92 M. Érdy, 'Hun and Xiung-nu Type Cauldron Finds Throughout Eurasia', *Eurasian Studies Yearbook* 67 (1995), 5–94. For the latest find which for the first time was discovered in an archaeological context, see: Sz. Honti and P.G. Gergely, 'Hun period sacrificial caldron [sic] from site Balatonlelle-Rádpusztá', *Somogyi Múzeumok Közleményei* 17 (2006), 71–8.
- 93 One should note here the methodologically problematic idea that the Sarmatians would have been transferred from the Hungarian Plain in the Valeria province of Pannonia by the Huns after 420, which could explain the local character of the box *fibulae* of the Keszthely Culture about the end of the 6th to the early 7th century: see E. Tóth, 'Zur Herkunft und Ikonographie der Scheibenfibel der Keszthely-Kultur', *Zalai Múzeum* 14 (2005), 183–202.
- 94 I spoke about this topic at the congress cited in n. 26.
- 95 F. Daim, 'Byzantinische' Gürtelgarnituren des 8. Jahrhunderts', in *idem*, (n. 13).
- 96 In Central and Eastern Europe it is usual to avoid any analysis of the term 'richness' in terms of the archaeology of cemeteries.
- 97 For the first modern approach to this issue, see F. Daim, 'Vom Umgang mit toten Awaren', in A. Nusser (ed.), *Erinnerungskultur im Bestattungsritual. Archäologisch-Historisches Forum* (Mittelalter Studien 3), Munich, 2003, 41–57.
- 98 Bálint (n. 40), 294–6.

Byzantium and the Slavs in the Light of Goldsmiths' Production

Bartłomiej Szymon Szmoniewski

Introduction

It is very difficult to determine the extent to which Byzantium influenced the production of Slavic jewellery. This issue has been researched to varying degrees according to period and geographical area. The picture is also influenced by the different nature of the comparative material, which will be examined in this paper. Most information is provided by those areas under the strongest influence from the Byzantine Empire, but even here one has to deal with partially processed material. The closest comparative material for Slavic metalwork comes mainly from the Byzantine provinces and borderland areas.

In this paper I will discuss both current trends and ideas in 'Slavic' archaeology with regards to the origins of Slavic metalwork, as well as making my own observations. The paper covers the extensive geographical areas – western,¹ eastern² and southern³ – inhabited by the 'historic' Slavs. However, it was not, as it seems, a uniform cultural area, but composed of different parts which, subject as they were to different influences, need to be considered separately. The main question still under debate is: who were the early Slavs?⁴

The terms 'Byzantine' and 'Byzantine nation' are also difficult to define. I am in agreement with Cyril Mango's comment that: 'it must be strongly emphasised that there never existed a Byzantine 'nation':⁵ as Mango has shown the Byzantine Empire was not ethnically homogeneous.⁶ It is also problematic to define exactly what is 'Byzantine' jewellery. By this I do not mean 'high status' jewellery, but the common ornaments used throughout the Empire.

In general Byzantine jewellery exercised both a direct and indirect influence on Slavic metalwork production. As a

springboard for this discussion I have selected three time periods covering the 6th to the mid-13th centuries roughly parallel to the Early Byzantine period (6th–9th century), the Middle Byzantine period (10th–12th) and the beginning of the Late Byzantine period (13th–15th).⁷ The first period ranges from the 6th century, when the Slavs first appeared on the borders of the Empire,⁸ to the end of the first half of the 8th century when the early Slavic cultures of the Volyn'tsevo horizon/culture vanish.⁹ Next is the Great Moravian period from the 9th to the beginning of the 10th century¹⁰ and finally the period which sees the initial formation of the Slav polity in the form of the Bohemian¹¹ and Polish kingdoms,¹² and Kievan Rus'.¹³

The early Slavs

The early Slavs covered large areas of Central and Eastern Europe. There are three main archaeological cultures: the 'Prague' culture which included south-eastern Poland, the Czech Republic, Slovakia, western Ukraine, south-western Belarus,¹⁴ with regional variants in Ipotești-Căndești-Ciurel in present day Romania,¹⁵ and Sukow in north-western Poland and north-eastern Germany;¹⁶ the 'Pen'kovka' culture which ranged from central Ukraine to northern Moldavia and north-eastern Romania,¹⁷ as well as outliers from Byzantine Dobruja,¹⁸ and finally, the 'Kolochin' culture in south-eastern Byelorussia and western Russia.¹⁹

The question of Byzantine influence on the Slavic ornaments of the Early Middle Ages (6th–7th century) has not as yet been researched in depth. My attention here will focus on production artefacts, such as various types of casting moulds (Pls 1 and 2), star-shaped earrings (Pl. 3), as well as



Plate 1:1–3 Three stone moulds from Vadu Săpat (1), Argamum (2) and Budureasca (3), Romania

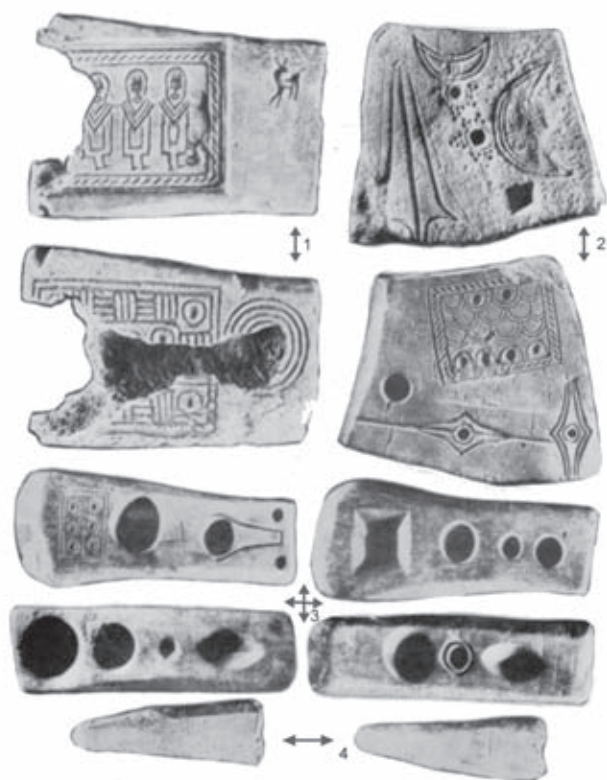


Plate 2:1–4 Bone moulds from Costești, Romania

brooches with human or animal decoration of the so-called 'Dnieper' style (Pl. 4), which scholars have viewed as 'exotic' for the Dnieper region, and finally embossed silver plate-brooches (Pl. 5).

Casting moulds occur in the Early Slav period with varying frequency; their greatest variety can be observed in the areas north of the Lower Danube. Owing to the stylistic connections between the shape of the mould negatives found in these areas with actual objects made of non-ferrous metals, one can prove the existence of southern, Byzantine areas of stylistic and technological influence. Their existence is confirmed by finds of moulds carved with various types of rosette-shaped patterns/designs, the outlines of star-shaped and melon-shaped earrings, and crosses and dies used for the casting of ornaments (Pl. 1:1–3). In contrast, in the northern and eastern parts of the Slavic territories there are moulds with trapezoidal, circular and rectangular designs, typical of the forest zone and the forest-steppe belt.²⁰ One curious example was one of a number of casting moulds found near the Budureasca Valley in the parish of Vadu Săpat in Romania (Pl. 1:1).²¹ It was made with great precision from a different material (grit stone) to the other moulds (limestone) found in the Budureasca Valley micro-region. One of the mould carvings is equivalent in form to a silver earring from Maglavit.²² Another mould from the Budureasca micro-region has impressions resembling pseudo-granulation of a type which reflects the stylistic influence of provincial Byzantine workshops (Pl. 1:3). A mould with a similar carving in the form of a number of small hollows in two rows joined with an arc is analogous to ornaments found in the Byzantine fortification of Argamum in northern Dobruja in Romania (Pl. 1:2).²³

Star-shaped earrings (Pl. 3), which are known to have been present in various cultural environments, provide a starting



Plate 3 Star-shaped earrings from Pastyr'ske hill fort, Ukraine

point for this discussion. They were most popular in the central Danube area, Transylvania and along the Adriatic coast, but are also quite common in a belt stretching from the lower Danube, along the Carpathians, and up to the Dnieper Basin. Single specimens only have been found in Sicily, north Italy, Greece and the Crimea. In Central Europe (the Carpathian Basin) they were found in Avar graves. A few examples were also recovered from Slav settlements and cemeteries on the northern rim of the Carpathian Basin. In Eastern Europe they are known from hoard inventories from the middle Dnieper Basin, i.e. from the 'Antiquities of the Antes' and the territory of the 'Pen'kovka' culture. In southern Europe star-shaped earrings seem to represent an 'international' fashion which spread to a variety of cultures, starting with the Lombards, then on to the Koman culture, the population of the Avar khaganate, and to those Slavs who lived outside the Avar Empire.²⁴ The prototype of star-shaped earrings must be sought in earrings from Sicily dated to the end of the 6th and the beginning of the 7th century.²⁵ Gradually they became more elaborate and by the second half of the 7th century they consisted of a lunate body with a disc-shaped pendant adorned with three or five rays (Pl. 3). A perceptible increase in the quantity and geographical diffusion of star-shaped earrings took place in the 7th and 8th centuries. The scope of their expansion was, however, extraordinarily fluid and culminated in a number of regional variations. In the Balkan peninsula single specimens can be found as late as the 10th–11th century.²⁶ Star-shaped earrings were produced either by casting or embossing. Three mould negatives for star-shaped earrings and a metal die have been found in Central Europe and another similar mould has been found on the Adriatic coast.²⁷

Two stone moulds were found in Romania in Soldat Ghivan street, Bucharest,²⁸ and Dichiseni,²⁹ and a bone die/mould is known from Costești, also in Romania.³⁰ The most interesting is the bone die/mould from Costești (Pl. 2:2). On the surface were

engraved two negative designs for star-shaped earrings in the form of a lunate body and a pendant with five rays. It can be assumed that the negatives from Costești served as the primary mould *i.e.* they were used as a receptacle for molten (lost) wax which when hardening took on the exact shape of the mould. Then the wax was coated in clay and baked in such a way that the wax was able to escape. The cavity left by the wax was then filled with molten metal. When the metal cooled down the clay mould was broken to reveal the metal casting, an exact copy of the original model. The lost-wax technique ensured that the mould was considerably less susceptible to wear: if it had been used as an ordinary die and subjected to constant hammering, its life would have been all too short. Although this explanation of the mould's function is plausible it does not invalidate the generally accepted interpretation of the Costești find as a set of embossing dies. The final step, after making the lunate bodies and the pendants, was to decorate them with granulation and filigree.

Stone moulds were used in the casting process. Moulds such as those from Bucharest (Soldat Ghivan street) were probably used for the central element of star-shaped earrings. More detailed designs are on the mould negative from Dichiseni: here the surface was engraved with a design for a complete star-shaped earring which included not only the lunate body but also three pointed rays. Further mould negatives from Cucuteni and Soveja in Romania were used for both the central part of the earrings and the star-shaped pendants.³¹ In a broader European context one can point to two metal dies for producing the body of a star-shaped earring: one comes from Biskupije in Croatia,³² the other from Břeclav-Pohansko in Moravia, Czech Republic.³³ The die from Biskupije was part of a set of 24 metal positive and negative moulds for producing a variety of decorative objects. Some of the Biskupije models have analogues in the Avar cultural zone.³⁴ Two of the published metal dies were used to emboss the lower elements of the earrings – round pendants with rays (Pl. 3).

Other examples of jewellery are the so-called 'anthropomorphic' brooches of the Dnieper class which constitute some of the most characteristic and 'exotic' artefact types of Early Medieval metalwork from Eastern Europe. These brooches make up a significant element of the material culture of the eastern Slavonic region in the later phases of the Early Middle Ages. Anthropo-zoomorphic brooches of the Dnieper type dating from the early phases of the Early Middle Ages are mainly known from Eastern Europe. Their distribution pattern can be divided into two distinct areas: the first takes in the zone of the Ukrainian forest and steppe and the river-basin of the middle Dnieper, while the second is limited to the south-eastern Crimea.³⁵ They are well represented among the finds coming from the hill fort at Pastyr'ske in Ukraine, as well as in the grave goods from inhumation cemeteries in the Crimea, Avar graves from present day Hungary, and Serbia; individual pieces are also known from the Republic of Moldova, Bulgaria, Belarus and northern Russia.³⁶ The group of objects presented in this paper has not, apart from some short studies, been addressed in any detail. The most significant treatment of the topic is the incomplete study by A.K. Ambroz³⁷ who assembled the majority of known brooches and proposed a *schema* for their development. The following analysis of the manufacturing

techniques for the production of anthropo-zoomorphic brooches was conducted on the basis of a detailed visual observation of the brooches from Kölked-Feteketapu A³⁸ and from the collection of the Archaeological Museum in Cracow.³⁹ For the brooches from Martynivka (Martynovka), the monograph by Pekarskaja and Kidd was consulted.⁴⁰ The following analysis is devoted to two styles of brooches which can be distinguished within this 'family' of brooches of the Dnieper type.⁴¹

The first of these (Style I, with two variants) is characterised by the presence of two or three stylised bird and animal heads which project from the edges of the brooch's plates (Pls 4:1 and 4:2); the surface of the plate is additionally decorated with engraved ornament. A variant of this type sees the replacement of the animal head on the foot plate with a representation of a human face. A richly developed surface characterises the appearance of brooches in Style II, with two or three pairs of heavily stylised animal heads placed symmetrically along the top and bottom edges of the plates. In the majority of cases the plates as well as the bows are joined together by bars, forming a single open-work structure.



Plate 4:1–3 Anthropo-zoomorphic brooches from Martynivka, Ukraine (1), Kölked -Feteketapu A, Hungary (2), Pastyr'ske, Ukraine (3)

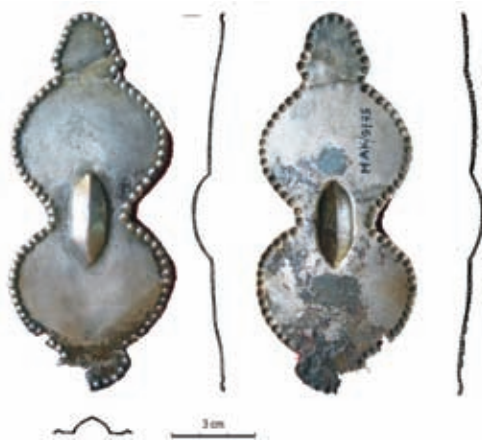


Plate 5 Double-plated silver brooch of the 'Dnieper' class from the middle Dnieper area (?), Archaeological Museum, Cracow

Additional decorative elements on certain specimens are plates with the representation of a stylised human head. Examples of this style generally lack any surface decoration. Style I includes, *inter alia*, the brooches from Martynivka (Pl. 4:1), Koziivka, Kölked-Feketekapu A, and Kaniv (Ukraine) and were probably made by Byzantine craftsmen.⁴² This is proved by the use of decorative elements and depictions of animals alien to the natural environment of the middle Dnieper.⁴³ The brooch from Kölked-Feketekapu A (Pl. 4:2), like the one from Martynivka, was first made on a wax slab in the shape of a brooch and then had the decoration added. Having examined the surface decoration, one can say that the design was cut out employing a triangular-sectioned chisel. Traces of wax modelling are best seen on the inside of the bow and as a series of grooves on the inside surfaces of the brooches' plates. It is worth mentioning here that the two examples from Martynivka differ slightly from each other. This difference is noticeable both in the surface ornamentation as well as in the form of the side projections in the shape of birds' heads. The brooch from Kölked-Feketekapu A was made in an identical fashion as traces of wax modelling are noticeable on the outside of the brooch and on the reverse of the bow. Moreover, there is a vertical groove on the reverse of the lower plate. So far it has been impossible to identify with any certainty the function of this groove. It seems that it may have facilitated the casting of the lower catch of the brooch's clasp and helped distribute the surface tension in the cooling metal more evenly.

The collection of the Archaeological Museum in Cracow is the most interesting with regard to the variety of manufacturing techniques within this group of anthropo-zoomorphic brooches. It consists of 10 specimens and one can distinguish three groups of brooches on the basis of their production techniques. Some analysed items were made using the lost wax method, most probably employing three different moulds. Differences in the production techniques are clearly visible. As with the brooches from Martynivka and Kölked-Feketekapu A, the brooches from Cracow have similar traces on the surface following the wax modelling process (Pl. 4:3): traces of the smoothing of the surface and modelling of the bow which can be observed on the inner surface. It is also noticeable in the analysis of the decorative motifs. In one case it

seems that the desired shape was also cut out in a wax slab and then the bird-head projections were attached using wax bridges. The wax models were covered with clay and, after melting out the wax, the clay model was filled with molten metal.

The fashion for decoration incorporating stylised animal and human representations penetrated into the middle Dnieper area. It was then transformed in the local environment and adapted to the existing means of decorating objects. The mass production of anthropo-zoomorphic brooches in the hill fort of Pastyr's'ke points to the popularity of this category of metal objects.⁴⁴

At the end of the 7th and beginning of the 8th century various cultural transformations occurred which changed the political landscape of the eastern Slavic territories: parts of the 'Pen'kovka' and Kolochin culture were transformed into the Volyntsevo culture, the Romens'ka culture settled on the left bank of the Dnieper, and the remnants of the Prague culture were displaced by the Luka-Raikovetska culture.⁴⁵ The most interesting is the older Volyntsevo horizon, which combined earlier traditions from the second group of the 'Antiquities of the Antes', as it is referred to in the Russian literature.⁴⁶ They developed earrings with star-shaped pendants as well as the previously-mentioned, wide-plated, anthropo-zoomorphic brooches which were alien to the Dnieper environment. A Caucasian origin has been suggested for the latter.⁴⁷ However, in this context, mention must be made of the bone matrix from Costești in Romania noted above, whose ellipsoid hollow most probably served to emboss the inside part of a brooch (Pl. 2:3). Moreover, traces of punches with rounded terminals are similar to ones known from other silver plate ornaments from that area. The die with an oval concavity is surely linked with the production of the convex centre-pieces of the so-called double-plated, silver embossed (also called anthropo-zoomorphic) brooches from Ukraine from the second group of the 'Antiquities of the Antes' (Pl. 5).

Finally, I would like to return to the deposits from Costești. Notable among the mould negatives from this deposit is the rectangular plaque with three human figures, representing in all likelihood three bishops (Pl. 2:1). There are a number of clues which support this interpretation. First, each of the figures wears a long robe, which could well be a Byzantine tunic known as a *sticharion* (a robe similar to a tunic though slightly longer), and a triangular-shaped garment which could be an *omophorion*. The *omophorion* was an indispensable part of liturgical costume and worn exclusively by Byzantine bishops.⁴⁸ In the Eastern Church it made its appearance by the end of 6th century and has been in use ever since. The shape of the *omophorion* varied (though not greatly) depending on the place where it was made; however, these differences do not correlate in a significant way with chronology.⁴⁹ The trio must represent three of the Early Church Fathers, perhaps John Chrysostom, Gregory of Nazianzus, and Basil of Caesarea.⁵⁰ This mould is unique in south and East Europe. Although its function is unclear, it can be surmised that it was used to produce either one of the facing elements of a reliquary box made of some organic material, or as a die for part of a buckle plate.

Southern Slavic territories and Great Moravia

Because of its proximity to Byzantium, the southern Slavic area was under stronger Byzantine influence compared with other regions occupied by the Slavs.⁵¹ Some academics assume that burial ornaments which date back to the period between the 8th and the first half of the 9th century were Byzantine imports which constituted the source of inspiration for local 9th–11th-century goldsmiths.⁵² Two regions, Dalmatia and Bulgaria, both of which according to Koder⁵³ constituted 'typical' Byzantine provinces, might also have been the starting point for goldsmiths' production in Great Moravia and the northern Slavic territories.⁵⁴ Kóčka-Krenz⁵⁵ has argued that Bulgaria could have been the region where the prototypes of semi-circular earrings with a long pendant might have originated, as well as earrings of the Świątniki type, and even possibly earrings with 'maize cob' pendants.

Great Moravia was a particular phenomenon and constituted the second state after the so-called Realm of Samo (Samo reigned for 35 years from 623/4).⁵⁶ The beginnings of Great Moravia date back to the time when Mojmir I (820–46) united the tribal centres, namely the Principalities of Nitra and Moravia, in the year 833 and it increased in importance in Central Europe during the reign of Svatopluk (871–94). It was then that its greatest, though brief, expansion occurred, reaching out beyond the previous area limited to the catchment basin of the rivers Morava, Dyje, Váh, Nitra and Hron. A large state body was founded which was named Magna Moravia by Constantine Porphyrogenitus. The first formal contacts with Byzantium were established during the rule of Rastislav (846–70) and were connected with attempts to make the Moravian church independent from the bishopric of Salzburg. The failure of these attempts resulted in paying closer attention to Byzantium and sending envoys to the Emperor Michael III (842–67) and Patriarch Photius. In response Constantinople dispatched the mission of Cyril (earlier Constantine) and Methodius, an event of enormous significance for the further history of the Slavic territories.⁵⁷ The decline of Great Moravia is associated with the Carolingian Franks who 'in a series of invasions, with the help of the Hungarians, physically destroyed the core of the kingdom, the principality of Moravia'.⁵⁸

Great Moravia can be seen as a combination of various cultural phenomena which are difficult to define. Great Moravian goldsmiths took their inspiration from antiquity, the Avars and the two strongest contemporary cultural centres: in the west the Carolingian Empire, and in the east, Byzantium.⁵⁹ Jewellery of Byzantine origin, the so-called Byzantine-oriental and the Veligradsky types,⁶⁰ could have been made locally, albeit under strong influences from Byzantium and oriental countries: 'these new forms and techniques were not copied passively, but were transformed in the local idiom, establishing in this way the roots of the distinctive Great Moravian jewellery style'.⁶¹ The problem of the origin and chronology of the so-called 'Veligradsky type' is still being debated.⁶² Niederle⁶³ was the first to identify these richly decorated ornaments as the products of Byzantine and oriental goldsmiths. In previous scholarship this type of ornament was dated from the second half of the 9th century and was regarded as being inspired by the jewellery of Byzantium and eastern Mediterranean and Adriatic models.⁶⁴ Szóke⁶⁵ argued

that any Byzantine-oriental influence was only hypothetical and that there was no evidence to indicate that these were Byzantine products, but on the contrary were inspired by Late Avar metalwork. Recently scholars have accepted the Byzantine origin of some of the jewellery.⁶⁶ Galuška identified the appearance of buttons with plain transverse ribbing found in Uherské Hradiště-Sady with a Byzantine mission there⁶⁷ and items from Staré Město and Mikulčice as Byzantine imports.⁶⁸

Ornaments from the Veligradsky horizon were the subject of a thorough study by Chorvátová in 2004,⁶⁹ and she has subsequently updated her findings.⁷⁰ To that horizon she attributes the carefully and precisely made head ornaments with knobs constituting the elements of outer attire. Her analysis of earrings and buttons (*gombíki*) has led her to distinguish three horizons for Byzantine-oriental jewellery. Horizon A (Pl. 6A) included earrings with a grape pendant with an ornamented upper arc, semi-lunate earrings with basket-shaped (openwork) beads, beads with granulation, and earrings with 'maize cob' and column-shaped pendants. This horizon also included gold buttons with either plain transverse ribbing or an embossed spiral motif as well as silver buttons with completely granulated surfaces. In Horizon B (Pl. 6B) new variants of six- and nine-basket earrings with beaded filigree appeared as did variations of bead earrings with granulation. Some semi-lunate and 'maize cob' earrings still persisted as did earrings with beads, but grape-pendant earrings seem to have disappeared. Also appearing for the first time are silver embossed buttons. Gold buttons with the embossed spiral motif or with plain vertical ribbing seem to have disappeared.

Horizon C (Pl. 6C) was dominated by earrings with four, six or seven beads while earrings with six or seven basket beads still flourished, although their production technique changed in favour of smooth wire or made from two thinner wires twisted together. Gold buttons embossed with a palmette in a heart-shaped meander and silver buttons with overall granulation or with granulated patterns still occurred in this horizon.

State-formation: eastern Slavic territories

The origin of eastern Slavic jewellery is again rather difficult to resolve. The territories encompass various cultures: local (the forest zone), northern (Scandinavia), western (the legacy of Great Moravia [?]), southern (Byzantine) and eastern (oriental).⁷¹ To discuss the issue of Byzantine influence on eastern Slavic jewellery I have chosen examples from different periods of eastern Slavic jewellery production. Here I discuss Korzukhina's comments on hoards from Rus', which she has divided into four chronological groups dating from the 9th century to 1240. According to her, from the mid–10th century, the techniques of embossing, filigree and granulation were employed, perhaps through the medium of the western Slavs.⁷² Analysis of hoard deposits between the 10th and the beginning of the 11th century indicates a lack of regional variants in the filigree technique which did, however, occur at a later period as indicated by finds from hoards dating from the 12th to the first quarter of the 13th century.⁷³ Zhilina's second technological group of filigree jewellery, dated to the 10th to 11th century and characterised by pressed filigree (imitating true filigree wire), is the result of contact between Byzantium and Rus'.⁷⁴

A



Plate 6 Examples of earrings and buttons from the Byzantine-oriental horizons according to Chorvátová's (n. 69) division: Top: Horizon A; middle: Horizon B; bottom: Horizon C

B



C



The first examples are Borshchevka-type earrings (also known as the Volhynian type),⁷⁵ and 'bow' beads with granulated ornament, both of which belong to the second group of Rus' hoards.⁷⁶ It is assumed that these ornaments, which are unparalleled in form, were produced in the Volhynia (western Ukraine) area and that their chronology is limited to the period from the mid-10th to the beginning of the 11th century.⁷⁷ Borshchevka-type earrings consist of an elongated profiled bead joined by two arcs. In its upper part there were three beads on each of the protruding elements of the arc, the beads formed from either sheet metal or openwork gadrooned wire. Generally earrings of this type can be divided into two kinds: either with a meander/plait element below the lower edge of the arc and with silver granules at the end, or specimens lacking that element.⁷⁸ They were made from high quality silver and each specimen consisted of more than 13 different elements (see **Pls 7–8** for the method of manufacture). On the basis of a thorough analysis of the

earrings from Gnězdovo, two types of wire – single and doubled both with circular cross-section – were distinguished. On the surface there were more than 2,100 granules measuring approximately 0.1mm in diameter, with larger ones ranging from 0.8 to 2mm.⁷⁹ Beads were constructed from nine elements made of sheet metal. The ornament on these consisted of even finer granulation with the granule diameter ranging from approximately 0.6 to 0.7mm.⁸⁰ Local production of these ornaments was confirmed by the find of a goldsmith's grave at Peresopnitsa on the Stubla in western Volhynia, dated to the beginning of the 11th century. In the largest barrow, in burial 29, the grave of a young man was found in which one part of the grave furnishings was a wooden box with eight bronze moulds, a small hammer, an iron anvil and various weights.⁸¹ Among those moulds were crescent-shaped negatives which served to emboss the halves of the 'bow' beads (**Pl. 9:A**), and four elongated and segmented ones to emboss pendants for Borshchevka-type earrings (**Pl. 9:B**). Duczko has argued that

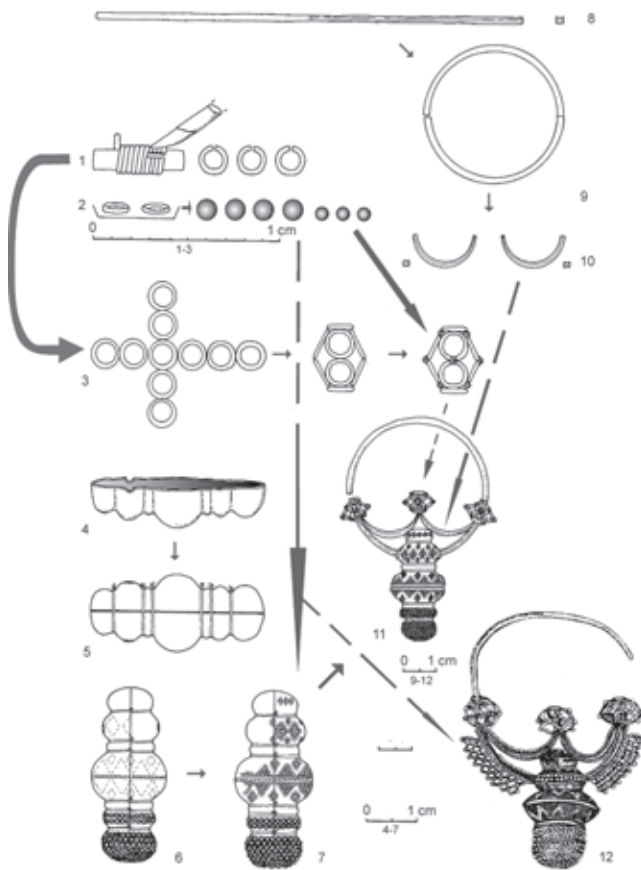


Plate 7 Production cycle of Borschchevka-type earrings, based upon an example from Ciechanów II, Poland

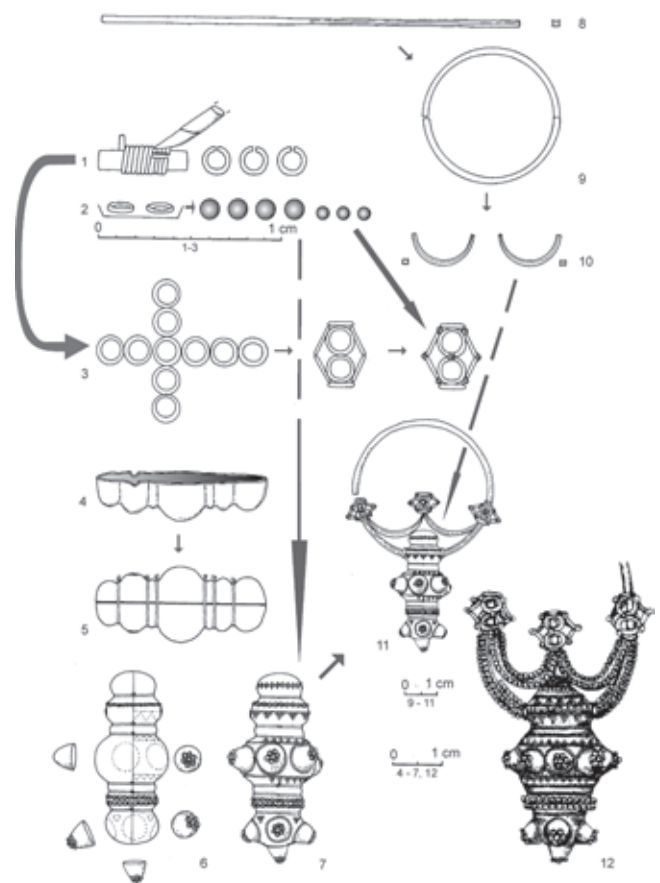


Plate 8 Production cycle of Borschchevka-type earrings, based upon an example from Torsta, Sweden

the presence of these ornaments confirm the existence of a jewellery production centre located in the Volhyn area under Byzantine influence.⁸² It is worth mentioning here that the trade route from Cracow–Volodymyr–Volyns’kyi–Luts’k–Kiev mentioned by al-Idrīsī ran through Peresopnitsa.⁸³

From c. 1050–1100 totally new types of jewellery were introduced into Rus’ which were undoubtedly influenced directly by Byzantine workshops (Pl. 10);⁸⁴ associated with the fashions of the urban élite,⁸⁵ they constituted elegant ornaments not previously found in the eastern Slavic milieu such as *kolty* (Pl. 11), bracelets, armbands, and diadems (Pl. 12) decorated with enamel.⁸⁶ Gold *kolty* were manufactured in Rus’ under Byzantine influence from the mid- to the end of the 11th century,⁸⁷ and from 1150 the local production of silver examples embellished with niello can be observed. Gold and silver *kolty* decorated with *cloisonné* enamel were produced for the upper classes, with princesses and boyarinas the typical clients. The lower classes usually wore coarser ornaments, cast in moulds, a phenomenon which occurred from around 1100.⁸⁸

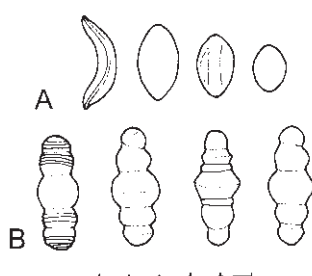


Plate 9 A and B Moulds from a goldsmith's grave at Peresopnitsa, Ukraine

Tools for the production of gold *kolty* decorated with *cloisonné* enamel have been found in Kiev.⁸⁹ One was a bronze template with a schematic representation of two confronted birds and two perforations symbolising elements of the tree of life (Pl. 13:2). A convex copper disk, slightly larger in size than the template, was found next to it (Pl. 13:1). The process was as follows: the template was placed on a gold sheet and the outlines of the shapes and the edge of the *kolt* were cut out. The next stage was to place the sheet onto the convex disc to achieve the convex surface. Then the segment structure which was made of gold strip was soldered from beneath and filled with enamel. The final stage was to join the two halves, either decorating the edge or leaving it unornamented (Pl. 14).

Recently, in the area of south-western Rus’ in Chełm (eastern Poland) two related artefacts were found (Pl. 15:1, 2);⁹⁰ one of them, a former or die with a beaded border, must have been used for making imitations of *kolty* with hollow beaded surrounds (Pl. 15:1). In the case of nielloed silver *kolty* the discoveries of formers or dies with varying decorative motifs confirmed their local manufacture. A silver sheet was put on the former, and then the required pattern was hammered out by hitting a lead ‘force’ placed over the silver sheet, with a jeweller’s hammer. Similar formers with traces of hammering have been found in some sites in Rus’ (Pl. 16).⁹¹ Next, to further emphasise the decorative motifs, the required shape was hammered out with smaller punches. Lastly, the edges of the semi-circular surface were trimmed and filed and then joined with the other half to make a whole, before the fastening element and other decorative elements such as rounded, hollow beads were finally added.⁹²



Plate 10 Gold and enamel *kolt*, Byzantine, 11th century



Plate 11 Gold and enamel *kolt*, Kievan Rus', late 11th to early 12th century



1



2

Plate 12:1 Gold and enamel diadem, Kievan Rus' (Kiev, hoard of 1889), 12th–13th century

Plate 12:2 Gold and enamel *kolty* and headdress ornaments, Kievan Rus' (Kiev, hoard of 1827), 12th–13th century

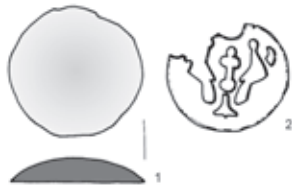


Plate 13: 1 and 2 Copper former and bronze template for the production of gold and enamel *kolty* from Kiev



Plate 14 Production cycle of a gold and enamel *kolt* from Kiev



Plate 15 Examples of dies for *kolty* from south-western Rus' (1 and 2) in Chełm, Poland

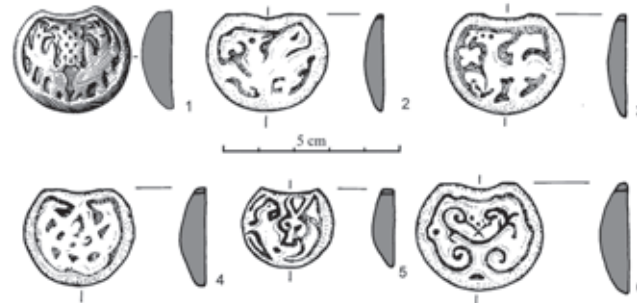


Plate 16 Examples of dies for *kolty* from Rus' 1: Navahrudak, Belarus; 2 and 5: Kursk, Russia; 3: Kaluga Oblast, Russia; 4: unknown place in Russia; 6: Vshchizh, Russia

State-formation: western Slavic territories

The production of jewellery in the western Slavic territories must be considered in the context of products from the southern and northern areas. In south-western Slavic jewellery, in addition to native patterns,⁹³ one can observe the influence of jewellery from Great Moravia. Earrings with three basket-shaped beads serve as an example of the transformation of earlier Great Moravian models: these were a development from the earlier four and multi-basket versions.⁹⁴ The transfer and adaptation of the production techniques of these ornaments was connected with the transferral of goldsmiths' workshops to Czech strongholds following the decline of Great Moravia.⁹⁵ In the case of the northern part of the western Slavic territories, various sources of influence on local jewellers have been proposed: Byzantine with local reciprocity;⁹⁶ Byzantine, through Great Moravia to Lesser Poland;⁹⁷ eastern, through Kievan Rus' to northern and central Poland;⁹⁸ Scandinavian and oriental;⁹⁹ and finally, eastern¹⁰⁰ and Arab, through the territories of southern Rus' as exemplified by imitations of filigree and granulation.¹⁰¹ J. Žak assumed that in the 10th and at the beginning of the 11th century, north-western Slavic jewellery production was initially the work of Jewish goldsmiths, and then both Jewish and local goldsmiths making formal references to Byzantine-oriental types.¹⁰² Earrings of the Břeclav-Pohansko variant from Zawada Lanckorońska, Poland (earrings with four beads), representing the Zawada type, can be identified as having been made under indirect influence from Great Moravia. It has been noticed that for the production of ornaments from the Zawada treasure a particular granulation technique was used, which consisted of mounting granules on wire rings – a technique which may have originated in Byzantine workshops.¹⁰³ This tradition is known from Great Moravian workshops and appears suddenly in the

Plate 17 Production cycle of gold buttons from Great Moravia

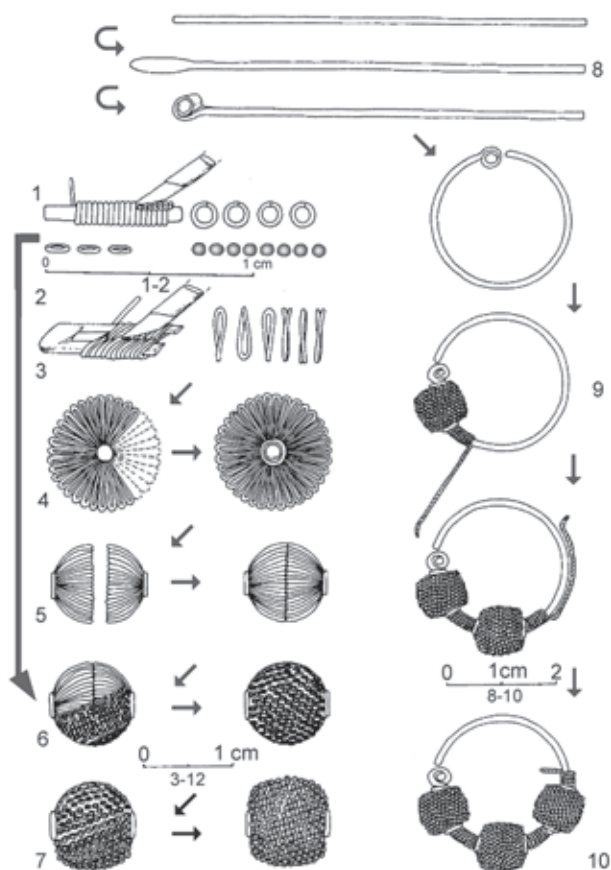
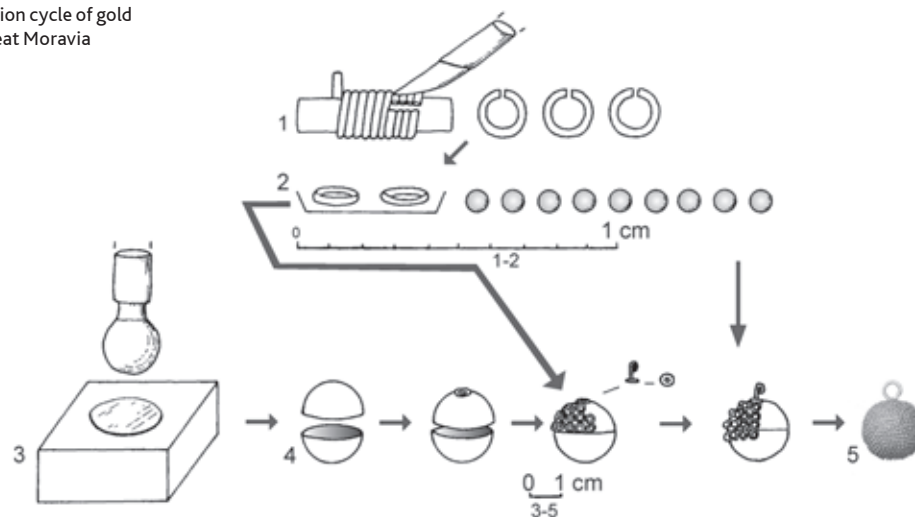


Plate 18 Production cycle of raspberry-shaped type earrings

mid- or third quarter of the 9th century (Pl. 17),¹⁰⁴ a century later the technique is used in Volhynia (Borshchevka-type of earrings) and after that on raspberry-shaped earrings known from Kievan Rus' (Pl. 18).¹⁰⁵

A southern origin is also suggested for silver dome-like earrings with pendants on chains.¹⁰⁶ Generally, two main trends can be distinguished in the jewellery production of the north-western Slavic territories. The first is local, with a strong undercurrent of older traditions characterised by ornaments of simple forms and made from less precious materials – a perfect example of this being headband ornaments. The second is a 'court' trend associated with higher social classes and represented by sophisticated ornaments which, while referring

to local traditions, also clearly reflect trends of ornamentation in the neighbouring south European territories. In the early state period, the influence of Byzantine jewellery production, mostly through Rus', can also be observed.

Conclusion

In conclusion one can say that three horizons which illustrate the intensity of the influence of Byzantine goldsmiths on Slavic precious metal production can be distinguished. In the Early Slavic period outside influences on non-ferrous metal craftsmanship came mainly from the Byzantine provinces. The closest influences can be observed in those areas located to the north of the Lower Danube as confirmed by finds of casting moulds and star-shaped earrings analogous to those found in Byzantine forts. Their presence in southern Slavic territories can be connected with the activities of itinerant craftsman from the Byzantine provinces. The second area was the forest-steppe and forest zone in Eastern Europe with a cultural and ethnic situation which is difficult to reconstruct. The transformation and development of the anthropo-zoomorphic style of the Dnieper-type brooches and star-shaped earrings took place here. In the older horizon of the Volyntsevo culture, there occurred silver plate brooches with embossed ornament, which were produced using dies or formers similar to those found to the north of the Lower Danube. In that case, Byzantine influences were undoubtedly transmitted through the nomads of the steppe zone.

The Great Moravian period saw a combination of strong Byzantine, oriental and Adriatic influences, the former intensified by the mission of Cyril and Methodius. Among jewellery techniques within the Byzantine-oriental horizon one sees the use of beaded filigree made of either single or double wire. Motifs and techniques were transmitted to the northern Slavic territories and the western part of the eastern Slavic territories through Great Moravia. Direct Byzantine influence on Rus' occurred during two periods: in the mid-10th century, and after the mid-11th century when new types of ornaments, the technique of *cloisonné* enamel, niello, and regional variations of filigree all appeared. Imitations of ornaments of Byzantine origin were confirmed by finds of locally produced casting moulds.

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Byzantine Jewellery of the Hungarian Conquest Period: A View from the Balkans¹

Ádám Bollók

It seems appropriate to begin with a clarification of the chronological period in question. The Hungarian Conquest period, a generally accepted label in Central European archaeological studies, has not gained currency in the English-speaking world. In a strict historical sense, the period spans the arrival and settlement of the ancient Hungarian tribal alliance in the Carpathian Basin between 895 and 902. Such a brief period, however, can hardly be studied or interpreted archaeologically. The term 'Hungarian Conquest period' is therefore used to denote a 70 to 150 year time-span, in part owing to the above consideration, and in part to the nature of the archaeological evidence.² In this paper, I shall focus on the Byzantine jewellery³ of this period, i.e. the 10th century. The first problem is the determination of what should be regarded as 'Byzantine' since it is sometimes difficult to distinguish between genuine Byzantine pieces and copies of Byzantine products made in the workshops of various fringe cultures. While the same difficulties are encountered in the Late Antique to Early Byzantine period as well, scholars studying 6th–7th century Byzantine jewellery and the archaeological heritage of the Avars settling in the Carpathian Basin are in a slightly better situation because, in addition to finely crafted pieces from the Empire, there are also several series of more simple, mass-produced types.⁴ The 6th–7th century extent of the Byzantine Empire too offers important clues because an ornament type known from North Africa, Syria, Asia Minor, and the Balkans can be more confidently identified as 'Byzantine' than the 9th–11th century jewellery types known solely from the Balkans and the fringes of the Empire. Adding to the uncertainties of identification is a peculiar feature of the 9th–11th centuries, in contrast to Late Antiquity,⁵ in that there are few textiles, frescoes, icons or illuminated manuscripts where items of jewellery are illustrated. The few portrayals of jewellery are usually restricted to crescentic earrings, such as the ones on the two female figures appearing on the shroud of Bishop Günther,⁶ the pieces seen on the fresco portraying St Barbara in Sta Maria della Croce of Casaranello in southern Italy,⁷ and on the great silk hangings of Brixen and Auxerre.⁸

This is one of the main reasons that very few 9th–11th century Byzantine jewellery types appear in major studies and exhibition catalogues.⁹ Another can be sought in the 20th century history of Central and south-eastern Europe, where historical studies were imbued with ethnocentrism, and historical and archaeological research often served to bolster national identities and national narratives. Allow me to illustrate the distorting influence of this ethnocentric view through a few examples. For many decades, the possibility that Early Medieval burials and their finds could be anything but Slavic was not even considered in the Slavic states of the Balkans. This axiom was made obvious by the very titles of the published articles, such as 'New Finds from the Slavic

Necropolis at Matičane near Priština'¹⁰ or 'Report on the Old Slavic Findspots in Macedonia'.¹¹ At the same time, southern Slavic research was fully aware of the fact that many of the jewellery types labelled Slavic could be derived from Byzantine prototypes. Those medieval wall paintings that survived the stormy centuries of Balkan history, most of which portray members of the aristocracy, show ladies wearing finely crafted Byzantine earrings. Suffice it here to mention the late type of crescentic earrings worn by the Lady Desislava on a fresco of the Bojana Monastery.¹² It is not mere chance that I spoke of an 'awareness' of Byzantine prototypes: scholars of Early Medieval Balkan archaeology constructed a rather peculiar model of interpretation, according to which they discussed Slavic jewellery and their Byzantine models without presenting the actual Byzantine prototypes.¹³ This can in part be explained by the then rather poor extent to which excavation reports were published, making the search for good parallels from the heartland of the Byzantine Empire fairly difficult. It must also be borne in mind that scholars of the period accepted the traditional view that exceptionally well-crafted pieces should be interpreted as genuine Byzantine products, while simpler bronze variants were their local copies. This approach contributed to the identification of simpler Byzantine jewellery types worn as part of everyday costume, whose overwhelming majority was brought to light in the Balkans and the Carpathian Basin, as Slavic products. In other words, simple, trinket-type Byzantine jewellery was, in this sense, appropriated by Slavic research and defined as a Slavic ethnic marker.

It seems instructive to briefly discuss the weakness of this approach. While there is no apparent rationale for not identifying the jewellery items recovered from Slavic burials as 'Slavic', one of the main problems in this respect is that very little is known about the region's ethnic make-up during the period in question. (To which we may add that the same holds true for several other regions too.¹⁴) Slavic research holds that the collapse of the Byzantine *limes* in the lower Danube region in the late 6th and early 7th centuries and the settlement of various Slavic groups in the Balkans meant that the regions over which Byzantium lost her former control automatically and immediately became Slavic, and thus the possible presence of other groups in these regions was not even considered, even though the descendants of the Late Antique population obviously remained in their homeland in most places.¹⁵ Due to the lack of reliable research in this field, very little is known about the rate of admixture between the newly arriving Slavic groups and the Late Antique population, or its extent by the 9th–10th centuries in various Balkan regions. The lack of cremation burials in the Balkans, regarded as a distinctively 'Slavic' element, is very striking (one of the most typically Slavic Balkan cemeteries is known from Olympia in Greece,¹⁶

and another, later, burial ground has been excavated at Kašić¹⁷); at the same time, the 9th–11th century cemeteries across the Balkans interpreted as Slavic share numerous similarities with the inhumation burials characterised by ‘reduzierte Beigabensitte’ typical of the descendants of the Late Antique population from the 5th century onwards in other regions. The exclusive interpretation of the post-7th century material as Slavic in the Slavic states of the northern Balkans, designed to integrate the archaeological material into the national past, is problematic because this approach not only obscures the colourful tapestry of the period, but also creates a virtually insurmountable obstacle to the better understanding of the broader cultural context. The issue of how the jewellery labelled ‘Slavic’ relates to simple Byzantine jewellery has never been explored;¹⁸ instead, the problem has been written off by speaking of the local bronze copies of Byzantine adornments in gold and silver, which in effect obscures the obvious fact that the greater part of the Byzantine Empire’s population was made up of poor people, who wore simple bronze jewellery as part of their everyday costume.¹⁹

The excavations in Corinth begun in the 1890s, yielding the cast variants of 9th–11th century north Balkan jewellery types, brought an important caveat regarding the weaknesses of this approach.²⁰ It became painfully clear that the search for the everyday variants of Byzantine jewellery did not call for the discovery of hitherto unknown prototypes of so-called Slavic jewellery because they could be found among the ‘Slavic’ jewellery from south-east Europe and the Carpathian Basin. Admittedly, the publication of the finds and findings of the excavations in Corinth in the 1950s was an exception, rather than the rule. This is still one of the main obstacles faced by current research. The publication of 9th–11th century burials and settlements lying in the heartland of Byzantium lags far behind that of the sites in the Carpathian Basin and the Balkans.²¹ It is therefore hardly surprising that archaeologists working in the Balkan states sought analogies to their finds where they had the best chances of finding them, namely in Central Europe – and the Carpathian Basin in particular – where systematic archaeological exploration had begun in the last third of the 19th century. By the late 19th century, Hungarian archaeologists had classified the enormous quantities of artefacts recovered from burials and cemeteries, and had distinguished two archaeological cultures or, better put, two archaeological horizons for the period in question: one typified by what were regarded as ‘typical ancient Hungarian graves’ characterised by weapons, costume accessories of precious metal, and horse burials, the other by humble commoners’ burials, erroneously labelled the Bjelo Brdo culture.²² The interpretative framework constructed at the time had a lasting impact on the research of the Conquest period.

A lively debate emerged on the ethnic background of the Bjelo Brdo culture at the turn of the 19th and 20th centuries, with most of the period’s leading scholars agreeing that the culture represented the archaeological heritage of the Slavs.²³ This interpretation was rooted in the widespread romanticising and ethnocentric thought of the 19th century. Even the best minds in Hungarian archaeology were unable to conceptualise the humble grave goods of the Bjelo Brdo culture as the archaeological heritage of the ancient Hungarians. As Ferenc

Pulszky²⁴ declared in 1891, ‘the ancient Hungarians were conquerors and not craftsmen, and thus their jewellery was made by their servants and prisoners-of-war, and the local population found here, in a period when art was on the decline’.²⁵ This line of thought excluded even the possibility that the commoners of the Conquest period could ever be identified. In order to better understand the background to the ethnic interpretation of the Bjelo Brdo culture, we must reach back to the works of Sophus Müller, a Danish archaeologist, who had argued for the Slavic origins of S-terminalled lock-rings, one of the most common finds of the Bjelo Brdo culture.²⁶ His arguments for regarding this jewellery item as an ethnic marker of the Slavs were accepted by most European scholars at the time. József Hampel’s monumental synthesis on the archaeology of the Conquest period,²⁷ a variant of which was also published also in German,²⁸ blended Pulszky’s national romanticism and Müller’s ethnocentric views. He attributed the *Reihengräberfelder* of the Bjelo Brdo culture to the Slavs of the Carpathian Basin. The identification of the S-terminalled lock-rings with the Slavs coincided with the basic interpretational framework of emerging Slavic archaeology: in an article appearing in 1894, Professor Lubor Niederle of Prague, regarded as the founding father of Slavic archaeology,²⁹ too argued that these lock-rings should be seen as ethnic markers of the Slavs.³⁰ Niederle’s views were widely accepted among the archaeologists and historians of the Slavic-speaking lands.³¹

Another frequent approach, even in the Balkans, was the analysis of archaeological assemblages from the perspective of modern nation-states, involving the projection of the modern state’s territory and the much-desired homogeneous nation back into the past, leading to the interpretation of the archaeological material as the heritage of an early nation-state.³² This approach disregarded the well-known multi-ethnicity of eastern and south-eastern Europe, and the shifting boundaries of Early Medieval state formations. Since one of the priorities of archaeological research was the identification of the ancestors of modern peoples, archaeologists were reluctant to distinguish Byzantine elements. It therefore came as a genuine shock when the excavations on Late Antique sites, such as Corinth, brought to light artefact types, which had previously been categorised as Slavic or Avar.³³ The ongoing debate over the Avar or ‘barbarian’ belt buckles between the 1930s and the 1950s is very instructive in this respect.³⁴ We should at this point recall that in her book published in 1952, Gladys Davidson listed many analogous finds to the trapezoidal Byzantine belt buckles, noting that she had received information on some of the unpublished pieces quoted by her from Professor Gyula László back in 1937 – the implication being that the buckles in question could be found both in the Carpathian Basin and in Istanbul, Samos, and Laurion.³⁵ Davidson thus explored all possible options in her search for parallels in order to identify Byzantine types since the material culture of Byzantine daily life represented by these minor objects was virtually unknown.

A few years later, the interpretation of these buckles appeared to be resolved. Two articles published simultaneously in 1955, one by Dezső Csallány,³⁶ the other by Joachim Werner,³⁷ both came to the conclusion, albeit through a slightly differing approach, that these articles were Byzantine products. The two



Plate 1 Jewellery of the so-called Bjelo Brdo type

approaches applied by these two scholars are suitable for describing the two analytical procedures by which the Byzantine nature of most Byzantine finds has been determined: the first, through the publication of the finds from the Empire's heartland; the second, through the comparative analysis of artefacts with a wide distribution in regions on the Empire's fringes.³⁸ Still, neither approach resulted in immediately turning the research of Byzantine material culture onto the right track. Half a decade later, Werner again opted for an ethnic approach and defined certain brooch types as Slavic.³⁹ The untenability of his views was noted by Dimitrios Pallas,⁴⁰ and later research too confirmed that these artefacts could hardly be regarded as ethnic markers and that some of the brooches in question can be regarded as Byzantine products.⁴¹

Slavic archaeological research remained virtually unaffected by these new findings. The 1940s were marked by a particularisation of research, rather than by the broadening of the interpretative framework. Large-scale excavations were begun at Staré Mešto in Moravia,⁴² bringing to light an assemblage of finds speaking of a strong cultural impact from a broadly interpreted Byzantine *Kulturkreis*. While acknowledging the undeniably Byzantine traits,⁴³ local scholars persistently emphasised the Great Moravian, *i.e.* Slavic nature of the finds.⁴⁴ Similar tendencies could be noted in Yugoslavian research. The first typologies and typochronological syntheses were conceived in the tradition of the Slavic ethnocentric perspective. Suffice it here to quote but a single eloquent example. The Bjelo Brdo type jewellery (**Pl. 1**) in the Serbian title of Mirjana Čorović-Ljubinković's study became Slavic jewellery in the French summary.⁴⁵ Countless similar examples can be cited. Lurking in the background again were the general political events of the period: in the later 1940s, the Soviet Union adopted and proclaimed Niederle's Slavic archaeology as the official research policy, which was expected to be followed in the satellite countries too.⁴⁶ The jewellery items, which were earlier described as ornaments found in Slavic graves, produced in workshops under Byzantine influence, were now axiomatically categorised as jewellery reflecting Byzantine influence and therefore Slavic pieces. The fact that the Hungarian Béla Szőke had convincingly demonstrated the Hungarian components and poly-ethnic nature of the Bjelo Brdo culture in 1962 had little effect.⁴⁷ Even the more open-minded Slavic scholars continued to regard the culture as a predominantly Slavic phenomenon,

while their more biased colleagues simply dismissed Szőke's findings and conclusions as some 'great Hungarian dream'.⁴⁸ Interestingly enough, from this perspective Szőke's study had little impact on Hungarian archaeological research since, even after the 1960s, Early Medieval archaeological research was dominated by a research perspective focusing almost exclusively on Eastern European finds and assemblages,⁴⁹ without any apparent interest in the south-eastern European elements of the commoners' culture. The few scholars studying these artefacts generally opted for the Slavic interpretation.⁵⁰

The breakthrough in this respect came in the 1990s, when Károly Mesterházy devoted two lengthy studies to two major groups of finds with south-east European connections,⁵¹ namely trapezoidal buckles and certain jewellery types, such as various types of earrings with four large and several smaller globular pendants, lock-rings, bracelets decorated with small loops of wire, crescentic earrings, and filigree decorated finger-rings (**Pls 2–3**).⁵² The title of his study is very telling: 'Byzantine and Balkan finds from 10th–11th century Hungarian burials'. Mesterházy was apparently reluctant to determine which pieces could be regarded as genuine Byzantine products and which as local, Balkan copies. A careful reading of his study reveals the dilemma he was grappling with. Discussing a variant of cast crescentic earrings, he noted that 'it is merely a question of time until variants made from precious metal are found in the more southerly regions of the Balkans'.⁵³ Elsewhere, he remarked that 'the Byzantine origins of this type can hardly be rejected on the grounds that similar pieces have not been found in Byzantium'.⁵⁴ Seeing that the bulk of the south-eastern European earrings known from the Carpathian Basin are represented by silver pieces and their cast bronze copies, Mesterházy interpreted them as Balkan imports, although he did suggest that some types were 'either imports among both the local and the Hungarian population, or pieces worn by the immigrant Slavic population'.⁵⁵ It would appear that Mesterházy was unable to entirely break free of the Slav-centred interpretation of these artefacts. A few years later, he devoted a lengthy study to the 10th–11th century trade network of the Carpathian Basin, based in part on south-east European find types, affirming again that the pieces in this category should be regarded as imports, and specifically as the imports of Balkan goods inspired by Byzantine products.⁵⁶ He supported this view by demonstrating that many pieces from the Carpathian Basin often share closer similarities with their counterparts from the Balkans than with each other.⁵⁷

A look at the finds from the Carpathian Basin from the perspective of the Balkans might contribute new hues to the overall picture painted by earlier research. In addition to searching for Balkan and Anatolian analogies to the finds, the identification of find types which lack a parallel might be useful too. Valeri Grigorov's excellent study on 7th–11th century metal jewellery from Bulgaria provides a good starting point for this exercise.⁵⁸ A closer look at his distribution maps indicates that there are hardly any 10th–11th century jewellery types which do not have their counterparts among the find assemblages from the Carpathian Basin. Even though Grigorov's data for the Carpathian Basin are rather patchy,⁵⁹ it is quite obvious that the various jewellery types have smaller concentrations in the Carpathian Basin than in the Balkans. Disregarding the various wire ornaments in the later 10th and

11th century find assemblages from the commoners' cemeteries, the remaining jewellery articles are predominantly types which have strong affinities with south-east Europe.⁶⁰ Knowing that an archaeological culture is not an entity *per se*, but a scholarly construct, its boundaries shift according to which artefacts or burial customs are – more or less justifiably or, conversely, arbitrarily – defined as its principal attributes and which are regarded as marginal phenomena. Current Hungarian research tends to relegate pieces with Byzantine and/or Balkan connections to the category of irrelevant attributes.⁶¹ Viewed from the Balkans, the Carpathian Basin is the northernmost extension of the south-east European cultural *koiné*, even if the finds from that region are mixed with types rare in the Balkans, which in a certain sense dominate the region's material culture.⁶² The relative frequency of finds with south-east European affinities is especially striking if compared to the distribution of the typical artefacts of the neighbouring regions in the Carpathian Basin. The finds of the so-called *Hacksilberfunde* horizon⁶³ and of the Kóttlach culture,⁶⁴ as well as the majority of the commodities obtained during the ancient Hungarians' military campaigns,⁶⁵ occur far less frequently in the material from the Carpathian Basin than certain Balkan finger-ring types (Pl. 4).⁶⁶ It is my belief that these south-east European find types should not be regarded as alien elements in the archaeological heritage of the Conquest

period. In order to place these finds into their proper context, the issue of to what extent these finds can be regarded as culturally Byzantine must be examined.

Two striking points emerge clearly from a closer look at the artefacts traditionally regarded as Byzantine products: very few finely crafted items of precious metal with Mediterranean affinities are known from the Carpathian Basin, even though these are the types which are principally regarded as genuine Byzantine wares. At the same time, there are several Byzantine jewellery types of which not one single piece has come to light in this region.

Altogether 13 crescentic earrings, a jewellery type traditionally identified as a Byzantine product, are known from eight sites in the Carpathian Basin to date (Pl. 5).⁶⁷ The first pair of these earrings to be found played an important role in determining the type as a Byzantine import:⁶⁸ the pair from Grave 1 at Kecel was made from gold and thus fitted the simplified criteria distilled from the axiom which equated good quality pieces with genuine Byzantine products. The silver bracelets from Tiszaeszlár (Pl. 6)⁶⁹ and Szarvas (Pl. 7)⁷⁰ were identified as Byzantine goods on the same grounds. Both are hinged bracelets: the birds on the piece from Tiszaeszlár and the griffins on the one from Szarvas are alien to the decorative motifs of the Conquest period. Curiously enough, no attempt was made to search for similar pieces from the Mediterranean,



Plate 2 Byzantine and Balkanic finds from 10th–11th century Hungarian burials according to K. Mesterházy's classification



Plate 3 Byzantine and Balkanic finds from 10th–11th century Hungarian burials according to K. Mesterházy's classification

Plate 4 Byzantine-type finger-ring with widening bezel from Grave 255 at Ibrány-Esbóhalom

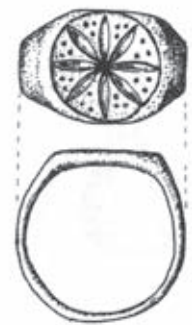


Plate 5 Silver earring of the crescent type



Plate 6 Byzantine-type hinged bracelet from Grave 12, Cemetery II at Tiszaeszlár-Bashalom

Plate 7 Byzantine-type
hinged bracelet from Szarvas



even though an overview of this type would have proved most instructive, seeing that comparable pieces from Byzantium, whence they originated, are generally dated to the 11th–12th centuries⁷¹ – the pieces from Hungary thus furnish evidence that the type had already appeared in the 10th century. At the same time, the silver and predominantly bronze trinkets found in addition to the finely crafted pieces could not be fitted into the concept equating good quality jewellery articles with Byzantine products. Neither should it be forgotten that the treatment of Byzantine types as Slavic, discussed above, remained unchallenged for a long time. The shortcomings and the pitfalls of both viewpoints are apparent if the cemeteries containing the burials of the Byzantine population are examined. The grave goods from the oft-analysed burial ground at Kastro Tigani⁷² included pieces made from the most common non-precious metal types, indicating that jewellery crafted from precious and non-precious metals were both commonly used in Byzantium,⁷³ and that their possession depended mostly on an individual's wealth. The examination of the jewellery types from larger Byzantine cemeteries proved this point even more forcefully. The 233 burials of the Azoros cemetery in southern Thessaly yielded a rich assortment of Middle Byzantine jewellery.⁷⁴ The finds included earring, finger-ring, and bracelet types known from the northern Balkans and the Carpathian Basin. Similarly, somewhat simpler jewellery types are known from the Greek mainland and the Greek islands too.⁷⁵ While it may be argued that these were not Byzantine, but Balkan products, there has been a steady increase in comparable finds from the Empire's Anatolian regions as shown by the few publications in this field. The finds include finger-rings with a shield-shaped bezel,⁷⁶ hinged bracelets of sheet metal,⁷⁷ twisted wire bracelets,⁷⁸ and earrings decorated with wire loops.⁷⁹ There is no apparent reason to doubt that most of the comparable pieces from the Carpathian Basin were indeed simple jewellery articles used also in Byzantium.

The issue of smaller workshops supplying a particular area or region cannot be side-stepped, even though very little is actually known about these workshops. While it is quite obvious that some jewellery items represent the local variant of a particular type, it is also clear that the basic form was distributed over a fairly extensive area. What is uncertain is whether a particular variant can be equated with the activity of a workshop. To take but one example: finger-rings with a widening bezel decorated with a heraldically posed eagle, or a bird holding a leafy branch in its beak shown in profile, are known from both the Balkans and Anatolia.⁸⁰ The few published Anatolian pieces also include types, such as the ones bearing a human head, which are virtually lacking from the Balkans.⁸¹ The activity of local workshops is reflected even more spectacularly by the presence of more variable types,

especially in cases when social circumstances were conducive to the growth of workshop centres.⁸²

There are a few jewellery types, especially among the most lavish assemblages, which have not yet been found in the Carpathian Basin. These include earrings and finger-rings decorated with *cloisonné* enamel, whose absence from this region is all the more striking because pieces from the 10th century are known from the Balkans: suffice it here to mention the crescentic earrings of the Preslav Treasure.⁸³ The dating of the finger-ring type from the Kastro Tigani cemetery to the Middle Byzantine period seems somewhat controversial because earlier publications assigned the entire burial ground to the 6th–7th century.⁸⁴ It might be more reasonable to conclude that the cemetery has a Middle Byzantine phase.⁸⁵ An earring from one of the burials is an 8th–11th century type,⁸⁶ while the finger-ring can most definitely be assigned to the Middle Byzantine period. David Buckton has convincingly argued that *cloisonné* enamel was not used before the 9th century in Byzantium.⁸⁷ The bird depiction on the finger-ring is best paralleled by finds from the 9th and 10th centuries, such as a bracelet from Thessalonica,⁸⁸ the necklace and earrings of the Preslav Treasure,⁸⁹ and a pair of earrings in the British Museum.⁹⁰ The finger-ring from the Šestovici cemetery in the Ukraine (Pl. 8), the counterpart of the piece from Kastro Tigani, can likewise be dated to the 10th–11th century.⁹¹ While it might be argued that jewellery articles decorated with *cloisonné* enamel did not reach the Carpathian Basin owing to their cost, we admittedly know very little about the original value of these pieces. A grave assemblage from Naupaktos must be cited in this respect. One burial in the partially excavated and published cemetery yielded a broken crescentic earring decorated with *cloisonné* enamel, suggesting that earrings of this type were in some cases part of everyday costume. There is nothing to indicate that the graves of the Naupaktos cemetery uncovered to date contained the burials of high-ranking, wealthy individuals.⁹²



Plate 8 Byzantine finger-ring from Šestovci

Basket earrings (Pl. 9) represent another jewellery type lacking from the archaeological record of the Carpathian Basin. In contrast to earlier views,⁹³ which dated the use of the type to the 6th–12th centuries,⁹⁴ we may now rightly assume that it represents a Middle Byzantine type.⁹⁵ It would appear that the 10th–11th century earrings of this type were mostly distributed in the Empire's Anatolian region. To the best of my knowledge, none are currently known from the Balkans. One possible explanation for their absence from the Carpathian Basin is that this earring type was solely distributed in the eastern Mediterranean, but not in the Balkans. The same cannot be said of the glass bracelets appearing in the 10th–11th centuries,⁹⁶ which were popular in both the Balkans⁹⁷ and Anatolia,⁹⁸ while no more than a few pieces are known from the Carpathian Basin.⁹⁹ In sum, we may say that while exquisitely crafted Byzantine pieces do appear in the archaeological record, as shown by the earring from Dunapentele (Pl. 10),¹⁰⁰ as do less elaborate jewellery items for daily wear,¹⁰¹ the distribution of 11th century types is much scantier than that of 10th-century types.

Two major tasks must be resolved in order to gain a better understanding of Byzantine jewellery of the 9th–11th centuries. Firstly, there is a need for the publication of the find assemblages and their contexts from excavations conducted in the heartland of the Byzantine Empire, because without this *corpus* of data, it is virtually impossible to distinguish genuine Byzantine pieces from their local copies.¹⁰² Secondly, it is necessary to deconstruct existing interpretations of the period's so-called southern Slavic jewellery and to discard the former narrative on the ethnic interpretation of archaeological finds.¹⁰³

The latter seems to be the easier of the two since in this age of post-modernism, the intellectual climate favours the construction of meta-histories and the rejection of former archaeological and historical narratives. Still, the separation of genuine Byzantine articles and their copies from the Balkans and the Carpathian Basin will remain problematic even if earlier assemblages and newly excavated ones are published according to modern standards. The precise cultural attribution of the various types, subtypes, and variants distinguished through a meticulous classification and

typological study of the finds will remain a problematic issue. The construction of categories, types and typological sequences is obviously an attempt to bring some order into the world around us. However, this approach is just one of the many techniques for studying the past. The creation of well-defined clusters, while undeniably useful, is not the single means of understanding the peoples of the past, whose world was much more open in some respects, and considerably more closed in others than we are apt to conceptualise today. We must make every effort not to become ensnared by our analytical approaches. Ancient peoples hardly thought in the categories we employ today and a more fruitful approach in this respect is to try to understand them on their own terms.

Obviously, I am not against the modern analytical procedures used by our discipline. I merely wish to draw attention to the fact that when speaking of Byzantine jewellery and Byzantine cultural impacts, we tend to think in different categories than the people who actually wore these ornaments as part of their costume. This is quite natural since we can hardly place ourselves in the life and mindset of peoples who lived 1,000 years ago. However, if our aim is to contextualise our observations concerning a particular artefact type – and this is, after all, one of our goals in cultivating archaeology – we can hardly ignore the people who used them. In other words, the main problem as I see it, is that many of the artefacts we label Byzantine goods were hardly regarded as such by their contemporary users living several hundreds of kilometres away from Byzantium. This label had no political or cultural relevance for them. Depending on the actual situation, an artefact of this type represented a prestige item from a distant land (or a curious, alien artefact), a copy of the prestige items used by the élite of a smaller or larger community, or, conversely, the routine use of an item used by most people around them. This primarily depended on the extent to which what we call Byzantine cultural impacts (whether genuine pieces or copies) actually affected a particular community. The contextual interpretation of the given artefact type in the recipient cultural environment obviously depended on the profoundness of the impact: the wider the distribution of an artefact type and the more it was copied, the more it tells us about the recipient culture, while the more traditional it remained, the more it adhered to the original model, the more it reveals about the donor culture.



Plate 9 Byzantine gold earring of basket type, Athens, Benaki Museum



Plate 10 Byzantine-type earring from Dunapentele

The bottom line of the above survey is that the lack of certain artefact types seems to be most striking. The almost complete absence of elaborately crafted, outstanding Byzantine jewellery pieces suggests that the acculturation undergone by the ancient Hungarians after their settlement in the Carpathian Basin – whose archaeological imprints have been discussed here – was a profound process. It would appear that instead of the superficial adoption or imitation of luxury items for prestige purposes, this was a process affecting everyday life in this culture. To employ a slightly bold parallel: in the same way as Byzantium politically exploited and culturally moulded into her own likeness the states of the region which Dimitry Obolensky succinctly termed the Byzantine Commonwealth,¹⁰³ there emerged a commonwealth of material culture which to a smaller or greater extent reflected Byzantium, whose members exploited this cultural heritage on their own terms. The ethnocentric, nationalistic political narratives of the 19th and 20th centuries transformed this commonwealth into a Moravian, Serbian or Hungarian narrative. One major task of 21st century research will be to identify the shared elements and the cultural dynamics of this commonwealth in order to better understand its nature and how it actually functioned.

Notes

- 1 This study is a slightly expanded version of a paper read at the conference “Intelligible Beauty”: Recent Research on Byzantine Jewellery’. In view of the complexity of the subject and its prolific literature, I have only quoted the most recent literature and, as far as this was possible, those works published in a western European language. For a comprehensive survey of the literature on 9th–11th century Byzantine jewellery, see V. Grigorov, *Metalni nakiti ot srednevekovna Bălgarija (VII–XI v.)*, Sofia, 2007; A. Bosselmann-Ruickbie’s PhD study (in print); and P. Langó’s PhD study (currently in preparation). For an excellent overview of the archaeology of the Slavic-speaking countries in the Balkans, see M. Takács, *A középkor régészete az észak-balkáni régióban – párhuzamos és összehasonlító vizsgálat* [The archaeology of the Middle Ages in the North Balkan region. A parallel and comparative analysis] (in press). I am grateful to Miklós Takács for his wide-ranging lectures, which drew my attention to many issues of north Balkan archaeology and for kindly allowing me to read his unpublished manuscript. This study was kindly supported by an OTKA grant (OTKA 72636).
- 2 For a brief overview, see P. Langó, ‘Archaeological research on the conquering Hungarians: A review’, in B.G. Mende (ed.), *Research on the prehistory of the Hungarians: A review*, Budapest, 2005, 177–80.
- 3 It seems useful to clarify the term ‘jewellery’ as used in this paper. There is no general consensus as to what artefact groups should be included in this category. In some cases, adornments applied to the belt or the costume are also included. In the case of material cultures, whose remains predominantly originate from archaeological contexts (most often from cemetery excavations), a distinction is often drawn between costume ornaments and jewellery in order to better circumscribe the circumstances (and ultimate aim) of deposition in the burial. The former generally include various costume adornments – usually made from some non-perishable material, most often metal – while the latter comprise articles used for decorating the body. Beads make up a special group of jewellery, which will not be discussed in this paper because their analysis has grown into an independent discipline with its own research techniques, among which various analytical procedures occupy a prominent place to the extent that any advances in bead studies are practically unimaginable without them.
- 4 Suffice it to quote here a single example for illustrating these difficulties. Several reviewers of a recent monograph on Byzantine objects in the material culture of the Avar period (É. Garam, *Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts*, Budapest, 2001) have pointed out that distinguishing those genuine Byzantine products reaching the

Avars as ‘imports’ in the form of gifts, booty, subsidy, or trade from their local copies is still problematic: see, E. Riemer in *Trierer Zeitschrift* 65 (2002), 383–6; J. Drauschke in *Zeitschrift für Archäologie des Mittelalters* 34 (2006), 316–20.

- 5 One possible reason for the frequent depiction of jewellery in the Late Antique period has been discussed by B. Küllerich, ‘The Abundance of Nature – the Wealth of Man: Reflections on an Early Byzantine Seasons Mosaic from Syria’, in E. Piltz and P. Åström (eds), *Kairos: Studies in Art History and Literature in Honour of Professor Gunilla Åkerström-Hougen*, Jonsered, 1998, 27–31. I would like to thank László Török for calling my attention to this paper.
- 6 For an excellent photo of the figures with earrings (in particular the better preserved figure on the left) see, B. Borkopp and M. Restle, ‘Guntertuch’, in R. Baumstark (ed.), *Rom und Byzanz, Schatzkammerstücke aus bayerischen Sammlungen*, Munich, 1998, cat. no. 64, 209. The debate over the date of the shroud has flared up again: the date in the early 11th century suggested by A. Grabar (‘La soie byzantine de l’évêque Gunther à la cathédrale de Bamberg’, *Münchener Jahrbuch der Bildenden Kunst* 7 (1956), 7–26) and his followers (e.g. A. Geijer, ‘Bishop Gunther’s Shroud in Bamberg Cathedral: Some Marginal Notes’, in M. Flury-Lemberg and K. Stolleis (eds), *Documenta Textilia*, Munich, 1981, 156–62) was challenged in the early 1990s by G. Prinzing (‘Das Bamberger Guntertuch in neuer Sicht’, *Byzantinoslavica* 54 (1993), 218–31), who linked the making of the shroud to the Bulgarian victory of the emperor John I Tzimiskes in 971. In contrast, T. Papamastorakis (‘The Bamberg Hanging Reconsidered’, *Δελτίον της Χριστιανικής Αρχαιολογικής Εταιρείας* 24 (2003), 375–92) believed that the shroud could be linked to Nikephoros II Phokas’ triumphal procession of 965. M. Restle (‘Das Guntertuch im Domschatz von Bamberg’, in K. Belke, E. Kisliger, A. Külzer and M. A. Stassinopoulou (eds), *Byzantina Mediterranea*, Vienna, 2007, 547–68) refuted Papamastorakis’ arguments and seconded Prinzing’s view, who maintained his earlier standpoint (G. Prinzing, ‘Nochmals zur historischen Deutung des Bamberger Guntertuches auf Johannes Tzimiskes’, in M. Kaimakova, M. Solomon and M. Smorag Rózycka (eds), *Byzantium, New Peoples, New Powers: The Byzantino-Slav Contact Zone, from the Ninth to the Fifteenth Century* (Byzantina et Slavica Cracoviensia 5), Cracow, 2007, 123–32). Despite the ongoing debate, a date in the later 10th century is now generally accepted. In spite of the excellent conservation work on the shroud, its poor state of preservation does not allow the reconstruction of minute details, such as whether the female figure is shown wearing an earring or a temple pendant as suggested by Natalija Ristovska in her paper read at the conference. For the shroud’s restoration see, S. Müller-Christiansen, ‘Beobachtungen zum Bamberger Guntertuch’, *Münchener Jahrbuch der Bildenden Kunst* 17 (1966), 9–16, and eadem., *Das Guntertuch im Bamberger Domschatz*, Bamberg, 1966 (the latter study was unavailable to me).
- 7 L. Safran, ‘Redating some South Italian Frescoes: The First Layer at S. Pietro, Otranto, and the Earliest Paintings at Sta Maria Della Croce, Casaranello’, *Byzantion* 60 (1990), 330, fig. 9.
- 8 For these silks, see A. Muthesius, *Byzantine Silk Weaving AD 400 to AD 1200*, Vienna, 1997, 47–50, figs 14A–B, 74A, 85B with earlier literature. For another perspective see, A. Cutler, ‘Imagination and Documentation: Eagle Silks in Byzantium, the Latin West and ‘Abbasid Baghdad’, *BZ* 96 (2003), 67–72.
- 9 While there has been a welcome proliferation of exhibition catalogues presenting various collections, this has not resulted in the identification of Middle Byzantine jewellery types intended for daily use, even though some of these superb catalogues were organised around the theme of ‘Alltag/Everyday life’, at least in their title, and a few indeed included pieces worn as part of everyday costume. Most of the latter, however, dated from the Late Antique period: see ‘Profane Welt und Alltag’, in C. Stiegemann (ed.), *Byzanz: Das Licht aus dem Osten. Kult und Alltag im Byzantinischen Reich vom 4. bis 15. Jahrhundert*, Mainz, 2001, 231–364; ‘Alltag und Luxus’, in L. Wamers (ed.), *Die Welt von Byzanz – Europas östliches Erbe*, Munich, 2004, 213–367. An exceptionally large number of pieces of Middle Byzantine jewellery can be seen in the exhibition catalogue *Kathēmerinē zōē sto Byzantino*, Athens, 2002.
- 10 V. Jovanović, L. Vuksanović and N. Berić, ‘New Finds from the Slavic Necropolis at Matičane near Priština’, *Balkanoslavica* 1 (1972), 107–11.
- 11 B. Babić, ‘Report on the Old Slavic Findspots in Macedonia’,

- Balkanoslavica* 4 (1975), 127–38.
- 12 For a good photograph, see J.D. Alchermes, 'The Bulgarians', in H. C. Evans and W.D. Wixom (eds), *The Glory of Byzantium. Art and Culture of the Middle Byzantine Era, AD 843–1261*, New York, 1997, 320. See also Albani, this volume, Pl. 2.
 - 13 For a recent example, see Ž. Tomić's study ('O nekim vezama ranosrednjovjekovne Slavonije i Dalmacije na primjeru polumjesecolikih naušnica s privjeskom', *Starohrvatska prosvjetjeta* 30 (2003), 155–6) on a group of earrings with grape bunch pendants (Giesler's Class 15c). For Giesler's classification, see J. Giesler, 'Untersuchungen zur Chronologie der Bijelo Brdo-Kultur. Ein Beitrag zur Archäologie des 10. und 11. Jahrhunderts im Karpatenbecken', *Prähistorische Zeitschrift* 56 (1981), 3–168.
 - 14 An exhaustive list of references would greatly exceed the scope of this study and I will therefore merely refer to the ongoing debate in this field: S. Brather, *Ethnische Interpretationen in der frühgeschichtlichen Archäologie* (Reallexikon der Germanischen Altertumskunde – Ergänzungsbände 42), Berlin and New York, 2004; V. Bierbrauer, 'Zur ethnische Interpretationen in der frühgeschichtlichen Archäologie', in W. Pohl (ed.), *Die Suche nach den Ursprüngen*, Vienna, 2004, 45–84; for the occasionally over-critical Anglo-Saxon attitude towards the continental (predominantly German) research tradition, see A. Gillett (ed.), *On Barbarian Identity: Critical Approaches to Ethnicity in the Early Middle Ages* (Studies in the Early Middle Ages 4), Turnhout, 2002. For a recent addition to the debate, see F. Curta, 'Some remarks on ethnicity in medieval archaeology', *Early Medieval Europe* 15 (2007), 159–85.
 - 15 It might rightly be argued that there was a marked population decline in the Byzantine Empire during the 6th century which played a major role in the transformation of the earlier settlement structure. This obviously contributed to the dominance of Slav groups in some regions, but it could hardly have led to the overall disappearance of the Romanised population. To quote but one example: in the 12th–13th centuries, a major portion of the population of Asenid Bulgaria was made up of pastoralist groups speaking a Neo-Latin tongue, who were slowly migrating northward from the more southerly regions of the Balkans: see, G. Ostrogorsky, *History of the Byzantine State*, Oxford, 1968 (2nd ed.), 403–4, esp. 404, n. 1. For a general overview of the Balkans in the 6th century, see F. Curta, 'Peasants as 'Makeshift Soldiers for the Occasion': Sixth-Century Settlement Patterns in the Balkans', in T.S. Burns and J.W. Eadie (eds), *Urban Centers and Rural Contexts in Late Antiquity*, East Lansing, 2001a, 199–217 (<http://www.clas.ufl.edu/users/fcurta/PEAS.pdf>); and *idem.*, *The Making of the Slavs. History and Archaeology of the Lower Danube Region, c. 500–700*, Cambridge, 2001b, 121–50. For another perspective, see A. Dunn, 'Continuity and Change in the Macedonian Countryside from Gallienus to Justinian', in W. Bowden, L. Lavan and C. Machado (eds), *Recent Research on the Late Antique Countryside* (Late Antique Archaeology 2), Leiden and Boston, 2004, 535–86; and *idem.*, 'Rural Producers and Markets: Aspects of the Archaeological and Historical Problem', in M. Grünbart, E. Kislinger, A. Muthesius and D.Ch. Stathakopoulos (eds), *Material Culture and Well-Being in Byzantium (400–1453)* (Veröffentlichungen zur Byzanzforschung 11), Vienna, 2007, 101–9. The difficulties in this field of research are reviewed by A. Dunn, 'The transformation from polis to kastron in the Balkans (III–VII cc.): general and regional perspectives', *Byzantine and Modern Greek Studies* 18 (1994), 60–80.
 - 16 T. Vida and T. Völling, *Das slawische Brandgräberfeld von Olympia*, Rahden, 2000.
 - 17 J. Belošević, 'Die ersten slawischen Urnengräber auf dem Gebiete Jugoslawiens aus dem Dorf Kašić bei Zadar', *Balkanoslavica* 1 (1972), 73–86.
 - 18 One good illustration of the approach equating quality with the place of manufacture, and of how even the very possibility of the existence of simple Byzantine jewellery has been rejected out of hand, is provided by the discussion of the bronze earrings found at Boljetin by: S. Ercegović-Pavlović, 'Le dépôt des boucles d'oreilles de la fortification romano-byzantine à Boljetin sur le Danube', *Archaeologica Jugoslavica* 8 (1967), 93: 'Tous ces exemplaires des boucles d'oreilles mentionnés [Staré Město, etc.], y compris la paire de Mačvanska Mitrovica, ont été exécutés dans une haute technique d'orfèvrerie, soit en filigrane, soit en granulation ou combiné, le plus souvent en or ou en argent. Tous ces exemplaires étaient considérés comme importation byzantine [...] En Yougoslavie, sans doute, les découvertes de Trilje et de Golubić, auraient représentés l'importation byzantine direct [...] Si nous opposons aux boucles d'oreilles du dépôt de Boljetin les analogies mentionnées, autant de la Yougoslavie qu'au delà de ses frontières, visuellement et à la première vue il n'y aurait pas de grandes différences dans la manière d'exécution de ces boucles d'oreilles et des boucles d'oreilles ornées, ce qui permettrait de les considérer comme Byzantines. Cependant la métal dont elles étaient faites, le cuivre et le bronze avec l'enduit mince d'étain, ne parle nullement en faveur de l'hypothèse de l'importation Byzantine quand il s'agit de ce dépôt de Boljetin'.
 - 19 For social conditions in the rural areas of Byzantium during the 10th century, based chiefly on data from the southern Balkans, see N. Oikonomides, 'The Social Structure of the Byzantine Countryside in the First Half of the Xth Century', *Symmeikta* 10 (1996), 105–25. It is instructive to quote the data published by J.-C. Cheynet and C. Morrisson on the income and subsistence conditions of the different social groups in Byzantium: 'three levels of income can be distinguished: (1) unqualified workers who were able, over a long period, to earn at most 1 *nomisma* per month, when not unemployed; (2) qualified workers, professional soldiers, and craftsmen, who enjoyed a wide margin of income, three to ten times more than that of unqualified workers; and (3) important officials, judges or strategoi, as well as the wealthiest merchants and bankers, whose incomes differed from the first category by a factor of 150 or more': C. Morrisson and J.-C. Cheynet, 'Prices and Wages in the Byzantine World', in A.E. Laiou (ed.), *The Economic History of Byzantium. From the Seventh through the Fifteenth Century*, Washington DC, 2002, 872. Thus, if we know that one *nomisma* covered the monthly expenses of a poor family, a jewellery article equivalent to a pair of earrings weighing several *nomismata* should be treated according to its value in Byzantine society (cf. the pair of earrings from Kecel discussed below).
 - 20 See G.R. Davidson, *Corinth: results of excavations conducted by the American School of Classical Studies at Athens. Vol. 12: The Minor Objects*, Athens and Princeton N.J., 1952.
 - 21 This holds true for the archaeology of Byzantine cemeteries too. It should be recalled that the overview of Byzantine cemetery archaeology written by A. Rettner for the Byzantium exhibition held in Munich in 2004 took up no more than a single page, and included a mention of all the major burial grounds of the Early, Middle and Late Byzantine period (cf. A. Rettner, 'Grabbeigaben', in Wamers [n. 9], 380). The record is rather patchy even if the number of cemeteries mentioned by Rettner could be increased by a full list of these cemeteries. The extent to which these burials have been destroyed is reflected by the comparison of the overall number of 5th–7th century Byzantine buckles with the pieces known from burials, settlements and hoards (for a list of finds with a secure context, see M. Schulze-Dörlamm, *Byzantinische Gürtelschnallen und Gürtelbeschläge im Römisch-Germanisches Zentralmuseum I, Die Schnallen ohne Beschläg, mit Laschenbeschlag und mit Festem Beschlag des 5. bis 7. Jahrhunderts*, (Kataloge vor- und frühgeschichtlicher Altertümer Band 30), Mainz, 2002, 1–2).
 - 22 For an overview of this period in the history of research in English, see Langó (n. 2), 203–05; see also I. Bóna, 'Die Archäologie in Ungarn und die ungarische Landnahme', *Acta ArchHung* 49 (1997), 347–9. J. Hampel did not use the label 'Bjelo Brdo': in his scheme, this horizon appeared as Group B and was for a long time termed 'Hampel B' in Hungarian research. The label 'Bjelo Brdo culture' appears to be ineradicable from the archaeological literature in spite of its multiple connotations. The choice of designation in the early 20th century was motivated by the conviction of Slavic researchers that these *Reihengräberfelder* with poor grave goods represented the archaeological heritage of the Slavs. Even though the culture's then known distribution predominantly coincided with the Hungarian-speaking regions of the Carpathian Basin (meaning that the names of the sites where the culture's finds had come to light were predominantly Hungarian), they consciously strove to choose a type site which would, by its very name, reflect the material's cultural attribution to the Slavs, finally settling on the Bjelo Brdo site, even though it lay on the fringes of the culture's distribution. (The selection of the type site can be linked to Lubor Niederle, the founder of Slavic archaeology: see Cs. Bálint, *Südungarn im 10. Jahrhundert* (Studia Archaeologica 11), Budapest, 1991, 161.) The anachronism of projecting an ethnic interpretation of this kind onto the 10th–11th centuries was disregarded, as was

- the simple fact that the name Bjelo Brdo does not appear in medieval sources (unlike the two Hungarian settlements, Hagymás and Szarvas, lying at a distance of 8.5km from each other, between which the village of Bjelo Brdo lay): see A. Kiss, 'Zur Frage der Bjelo Brdo Kultur', *ActaArchHung* 25 (1973), 334. The unbiased line of archaeological research regards this culture as a poly-ethnic complex incorporating the burials of a political formation: first, the burials of the Hungarian Principedom and, after 1000, the commoners' graves of the medieval Hungarian Kingdom, irrespective of ethnic groups.
- 23 Langó (n. 2), 200–07.
 - 24 For Pulszky and his influence on Hungarian archaeological thought, cf. Langó (n. 2), 200–02.
 - 25 F. Pulszky, *A magyar pogány sírleletek* [Pagan Hungarian Graves] (Értekezések a történeti tudományok köréből 14,3), Budapest, 1891, 3.
 - 26 S. Müller, 'Ueber slawische Schlafenringe', *Schlesiens Vorzeit in Bild und Schrift*, Breslau, 1877, 189–97. The distribution of this artefact type in the Carpathian Basin was mapped in 1956, based on the then known corpus of finds: A. Kralovánszky, 'Adatok az ún. S-végű hajkarikák etnikumjelző szerepéhez (Données sur les anneaux à nattes dits à extrémités en S en leur qualité d'indiquer l'ethnie)', *Archaeologiai Értesítő* 83 (1956), 206–12. The next overview of the well-datable specimens was published by K. Mesterházy, 'Az S végű hajkarika elterjedése a Kárpát-medencében', *A Debreceni Déri Múzeum Évkönyve* 1 (1973), 95–111. The most remarkable grave assemblage of the past few decades was recovered from Grave 357 of the Csekej cemetery (Čakajovce, Slovakia), which yielded an S-terminalled lock-ring and a coin of Rudolph of Burgundy (923–36) (M. Rejholcová, *Pohrebisko v Čakajovciach (9.–12. storočie)*, *Katalog*, Nitra, 1995, 38, Tab. LVII), calling for a reassessment of the artefact's dating, whose use had earlier been assigned to the last third of the 10th century onwards. Studies on the lock-ring's regional distribution in Transylvania and County Heves suggest that the use of these lock-rings in those regions can be dated to a later period: see E. Gáll, 'S-végű hajkarikák megjelenésének ideje az Erdélyi-medencében (About the Beginning of the Spread of the S-Shaped Lock Ring in the Transylvanian Basin)', *Acta Sicula* (2007), 239–51.
 - 27 J. Hampel, *Újabb tanulmányok a honfoglalási kor emlékeiről* (New studies on the antiquities of the Conquest period), Budapest, 1907.
 - 28 J. Hampel, *Alterthümer des frühen Mittelalters in Ungarn I–III*, Braunschweig, 1905. The change in Hampel's perspective compared to his previous synthesis published in 1900 can be felt in this monumental work, parts of which were also published in Hungarian two years later (cf. n. 27). Writing about the 10th–12th century *Reihengraberfelder*, Hampel (*ibid.*, 32) noted that 'Aller Wahrscheinlichkeit nach haben wir viele von diesen bescheidenden Grabeinlagen slawischen Bewohnern des Ungarlandes zuzuerkennen'.
 - 29 For Niederle and his scholarly oeuvre, see W. Antoniowiec, *Hołd wielkości Lubora Niederlego (Hommage à la grandeur de Lubor Niederle)*, Warsaw, 1948; B. Zástěrová, 'Lubor Niederle historic (Der Historiker Lubor Niederle)', *Archeologické Rozhledy* 19 (1967), 153–65.
 - 30 L. Niederle, 'Bemerkungen zu einige Charakteristiken der altslawischen Gräber', *Mitteilungen der Anthropologischen Gesellschaft in Wien* 24 (1894), 39–55.
 - 31 Bálint (n. 22), 161.
 - 32 See M. Takács's monograph (n. 1). The main theses of the work have been summarised in another study: M. Takács, 'A nemzetépítés jegyében megfogalmazott elvárások. Kutatási célok az észak-balkáni államok középkori régészetében (Expectations of nation building. Research objectives in the medieval archaeology of the states of the Northern Balkans)', *Korall* 7 (2006), 163–202, 302.
 - 33 The impact of the finds from Corinth on Slavic archaeology is most instructive. It seems worthwhile to quote Voislav Jovanović *in extenso*, especially his remarks on the earrings from Čečen: 'Solche Ohrhinge werden sporadisch auf dem weiten Territorium von der Slowakei bis Korinth und vom dalmatischen Kroatien bis Dobrudscha angetreten. Die grösste Zahl wurde auf jene Gebieten evidentierte, wo [...] die Bjelo Brdo-Kultur verbreitet war, und so gehören solche Ohrhinge in den Rahmen des Bjelo Brdo-Schmuckes. Doch wenn es sich um Funde solcher Ohrhinge auf Lokalitäten, die weit entfernt von dem Karpatenbecken sind, dem Mutterland der Bjelo Brdo-Kultur, handelt, wie z.B. die Funde aus Nordalbanien und besonders Korinth, dann könnte man in solcher Fällen diese Erscheinung aber nicht mit dem Bjelo Brdo-Einfluss erklären, sondern mit der Erzeugung einheimischer Werkstätten, die für einen weiten Verbraucherkreis einfacher Schmuck nach den Vorbildern des prunkvollen byzantinischen Schmuckes erzeugten'. (V. Jovanović, 'Über den frühmittelalterlichen Schmuck von Čečen auf Kosovo', *Balkanoslavica* 5 [1976], 136.) Similar remarks were the exception rather than the rule, seeing that Jovanović raised the possibility of Byzantine prototypes only in the case of this particular category of the finds from Čečen, and did not even consider a similar option for the other articles in the find assemblage despite the fact that their distribution showed a similar pattern. It must here be noted that the label 'Bjelo Brdo culture' was for a long time used in the broad sense owing to the many similarities between the finds from the Carpathian Basin and the northern Balkans, as well as the assumed common ethnic background: the label denoted not only the 10th–12th century archaeological assemblages from the Carpathian Basin and the neighbouring areas since the finds from the greater part of the northern Balkans were most often also lumped together here. The latter usage, however, is misleading owing to the many differences between the two regions.
 - 34 For a history of earlier research and the relevant literature, see J.H. Rosser, 'A Research Strategy for Byzantine Archaeology', *Byzantine Studies/Études byzantines* 6 (1979), 153–4; E.A. Ivison, 'Burial and Urbanism at Late Antique and Early Byzantine Corinth (c. AD 400–700)', in N. Christie and S.T. Loseby (eds), *Towns in Transition. Urban Evolution in Late Antiquity and the Early Middle Ages*, London, 1996, 114–20, for a broader perspective; cf. E. Riemer, 'Byzantinische Schnallen des 6. und 7. Jahrhunderts – Ein Forschungsüberblick', in B. Päffgen, E. Pohl and M. Schmauder (eds), *Cum grano salis. Beiträge zur europäischen Vor- und Frühgeschichte. Festschrift für Volker Bierbrauer zum 65. Geburtstag*, Friedberg, 2005, 269–82.
 - 35 'The information concerning these unpublished buckles was given me in 1937 by Prof. Gyula László', Davidson (n. 20), 268, n. 38.
 - 36 D. Čallany [Csallány], 'Pamātniki vizantijskogo metalloobratyvauščego iskusstva I (Les monuments de l'industrie byzantine des métaux I)', *Acta Antiqua Academiae Scientiarum Hungaricae* 2 (1954), 311–48; *idem.*, 'Pamātniki vizantijskogo metalloobratyvauščego iskusstva II (Les monuments de l'industrie byzantine des métaux II)', *ibid.*, 4 (1956), 261–91.
 - 37 J. Werner, 'Byzantinische Gürtelschnallen des 6. und 7. Jahrhunderts aus der Sammlung Diergardt', *Kölner Jahrbuch für Vor- und Frühgeschichte* 1 (1955), 36–48.
 - 38 Dezső Csallány offered an evaluation of the buckle collection purchased by Gyula Mészáros in Istanbul, which he brought with him when he returned to Hungary, while Joachim Werner discussed the buckles in the Diergardt Collection of the Römisch-Germanisches Museum in Cologne. They both provided an overview of the then known parallels to these buckles.
 - 39 J. Werner, 'Slawische Bügelfibeln des 7. Jahrhunderts', in G. Behrens and J. Werner (eds), *Reinecke-Festschrift zum 75. Geburtstag von Paul Reinecke*, Mainz, 1950, 150–72 (although he identified the 'Martynovka' type mounts as Byzantine products in this study: *ibid.*, 169); *idem.*, 'Neues zur Frage der slawischen Bügelfibeln aus südosteuropäischen Ländern', *Germania* 38 (1960), 114–20. For Werner's ethnocentric approach and interpretation, see H. Fehr, 'Hans Zeiss, Joachim Werner und die archäologischen Forschungen zur Merowingerzeit', in H. Steuer (ed.), *Eine hervorragende nationale Wissenschaft. Deutsche Prähistoriker zwischen 1900 und 1995* (Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 29), Berlin and New York, 2001, 311–415; *idem.*, 'Volkstum as Paradigm: Germanic People and Gallo-Romans in Early Medieval Archaeology since the 1930s', in Gillett (n. 14), 177–200.
 - 40 D. Pallas, 'Données nouvelles sur quelques boucles et fibules considérées comme Avars et Slaves et sur Corinthe entre le VIe et le IXe siècles', *Byzantinobulgarica* 7 (1981), 306–16.
 - 41 C. Katsougiannopoulou, *Studien zu ost- und südosteuropäischen Bügelfibeln*, Bonn, 1997, 28, 78–9; Vida and Völling (n. 16), 26–32; F. Curta, 'Female Dress and 'Slavic' Bow Fibulae in Greece', *Hesperia* 74 (2005), 129–32.
 - 42 V. Hrubý, *Staré Město. Velkomoravské pohřebiště "Na Valách"*, Prague, 1955.

- 43 The various types and their chronology have been recently discussed by H. Chorvátová, 'Horizonty byzantsko-orientálneho šperku na tzv. veľkomoravských pohrebiskách (Horizonte des byzantinisch-orientalischen Schmucks auf den sogenannten großmährischen Gräberfeldern)', in J. Bartík (ed.), *Byzantská kultúra a Slovensko, Zborník štúdií*, Bratislava, 2007, 83–101, and Š. Ungerman, 'Ženský šperk staršieho veľkomoravského horizontu (Frauens Schmuck des älteren großmährischen Horizonts)', *Archeologické rozhledy* 57 (2005), 707–49. For an attempt at a more realistic chronological framework, see B.M. Szőke, 'Pannonien in der Karolingerzeit: Bemerkungen zur Chronologie des frühmittelalterlichen Fundmaterials in Westungarn', *Schild von Steier*, Beihefte, 2008/4, 46–9.
- 44 Although it must be mentioned in all fairness that Hrubý did suggest that some might have been Byzantine imports: see Hrubý (n. 42), 244. Allow me to illustrate the difficulties of research conducted from a national perspective by quoting Bořivoj Dostál's definition of 'Great Moravian' jewellery: B. Dostál, 'Zur Datierungsfrage des grossmährischen Schmucks', *Zalai Múzeum* 3 (1991), 81, 83, 84: 'Als grossmährisch wird jener Schmuck bezeichnet, den man auf dem ursprünglichen Territorium Grossmährens [...] und auf einigen kurzfristig, angegliederten Regionen [...] in Flach- oder Hügelskelettgräbern mit den Kennzeichen des heidnischen Begräbnisritus finden [...]'. We have here an emphatically historical interpretation, which, obviously, cannot be rejected out of hand, if the necessary critical filters are rigorously applied. What do we know about the chronology of these jewellery articles? He continues: 'Ich wiedmete mich ausführlicher der donauländischen Komponente des grossmährischen Schmuck und seiner Chronologie, um zu zeigen, dass sein Anfang schon in der vorgrossmährischen Zeit [...] und sein Ende in nachgrossmährischen Zeit [...] steckt [...]'. In other words, the distinctive jewellery of the state known from the historical records precedes and survives the state, after which it had been named. Moreover, 'Ohne gemeinsame Vorkommen mit typischen grossmährischen Waffen, Reiterausrüstung und Keramik und ohne Berücksichtigung schriftlicher Quellen wäre es nicht möglich, ihn als grossmährisch zu unterscheiden'. Regarding the other component of 'Great Moravian' jewellery, namely the pieces bespeaking the cultural influence of Byzantium, Dostál notes that 'Der Schmuck der grossmährischen Oberschicht, der unter byzantinischen Einflüssen entstand, kommt überwiegend (ausser traubenartigen Ohrringen) nur in den politischen Zentren vor, und im eigentlichen Mähren ist er auf das 9. Jahrhundert beschränkt'. The principle is not immediately apparent: a piece of jewellery is 'Great Moravian' if it came to light in an area mentioned in the written sources and identified archaeologically. However, the pieces or types in question cannot be linked exclusively to the Moravians either chronologically, spatially, or culturally since they either be distinguished from similar finds in neighbouring regions. In other words, what we have here is an inter-regional *koiné* coloured by local tastes. The jewellery items in question are 'Great Moravian' only in the sense that they had been worn by Moravians. At the same time, claims concerning the 'impact of Great Moravian jewellery on neighbouring areas' are culturally senseless. The oft-quoted textbook example of this outworn approach is a study by B. Dostál, 'Das Vordringen der grossmährischen materiellen Kultur in die Nachbarländer', in *Magna Moravia, Sborník k 1100. výročí příchodu byzantské mise na Moravu*, Prague, 1965, 361–416.
- 45 M. Čorović-Ljubinković, 'Metalni nakiti belobrdskog tipa. Grozdolike minduše. – La parure en metal chez les slaves du sud aux IX–XI^{ème} siècles. Boucles d'oreilles à appendice en forme de grappe', *Starinar* 2 (1951), 21–56.
- 46 Takács (n. 32), 168; Curta 2001b (n. 15), 10, 27.
- 47 B. Szőke, 'A bjelobrdi kultúráról – Sur la civilisation Bjelobrd', *Archaeologiai Értesítő* 86 (1959), 32–47; *idem.*, *A honfoglalás és kora Árpád-kori magyarság régészeti emlékei* [The Archaeological Heritage of the Conquest period and the Early Árpadian Age] (Régészeti Tanulmányok 1), Budapest, 1962.
- 48 E.g. Z. Vinski, 'O postojanju radionica nakita starohrvatskog doba u Sisku (Zur Frage des Bestehens von Schmuckwerkstätten aus der altkroatischen Zeit in Sisak)', *Vjesnik Arheološkog muzeja u Zagrebu* 4 (1970), 86.
- 49 Csanád Bálint described this research perspective as an 'Orient-preference': see Cs. Bálint, 'On "Orient-preference" in archaeological research on the Avars, proto-Bulgarians and conquering Hungarians', in J. Henning (ed.), *Post-Roman Towns, Trade and Settlement in Europe and Byzantium I*, Berlin and New York, 2007, 545–62.
- 50 It is hardly surprising that Jochen Giesler proved to be the exception to this rule. Due to his German schooling, he remained unaffected by the research preferences of Hungarian scholarship. He convincingly demonstrated the Balkan connections of several artefact types known from the Carpathian Basin: Giesler (n. 13), 95–7. Hungarian reviews of Giesler's study simply ignored these issues.
- 51 In the introduction to his study, Mesterházy clearly stated that he would not discuss certain jewellery types, such as rings with widening bezels, necklace pendants, pendants and crosses, which also had south-eastern European affinities (the function of these crosses in the Carpathian Basin is still debated because it is usually impossible to determine whether they were worn as religious relics or 'jewellery'). These omissions have in part been remedied; see T. Keszi, '10. századi zárt lemezgyűrűk pajzs alakúan kiszélesedő fejjel, pentagramma és madár ábrázolással (Geschlossene Plattenringe aus dem X. Jahrhundert mit schildförmig ausgebreitetem Kopf, mit Darstellung von Pentagramma und Vogel)', in Á. Perémi (ed.), *Anépvándorlások fiatal kutatói 8. találkozójának előadásai*, Veszprém, 1999, 1333–48; P. Langó and A. Türk, 'Honfoglalás kori sírok Mindszent–Koszorús-dűlőn. Adatok a szíjbefűzős bizánci csatok és a délkelet-európai kapcsolatú egyszerű mellkeresztek tipológiájához (Landnahmezeitliche Gräber in Mindszent–Koszorús-dűlő. Angaben zur Typologie der trapezförmigen byzantinischen Schnallen und einfachen Brustkreuze mit südosteuropäischen Beziehungen)', *Móra Ferenc Múzeum Évkönyve – Studia Archaeologica* 10 (2004), 386–403; P. Langó, 'A kora Árpád-kori temetők kutatása [Research on the cemeteries of the Early Árpadian Age]', in E. Benkő and Gy. Kovács (eds), *A magyar középkorkutatás legújabb eredményei*, in press (included in the study is a list of the 62 reliquary pectoral crosses known to the author).
- 52 K. Mesterházy, 'Bizánci és balkáni eredetű tárgyak a 10–11. századi magyar sírletekben I (Gegenstände byzantinischen und balkanischen Ursprunges in den ungarischen Gräberfeldern des 10.–11. Jhs. I)', *Folia Archaeologica* 41 (1990), 87–115; *idem.*, 'Bizánci és balkáni eredetű tárgyak a 10–11. századi magyar sírletekben II (Gegenstände byzantinischen und balkanischen Ursprunges in den ungarischen Gräberfeldern des 10.–11. Jhs. II)', *Folia Archaeologica* 42 (1991), 145–77.
- 53 Mesterházy 1991 (n. 52), 145.
- 55 *Ibid.*, 1990 (n. 52), 99.
- 55 *Ibid.*, 1991 (n. 52), 152.
- 56 K. Mesterházy, 'Régészeti adatok Magyarország 10–11. századi kereskedelméhez [Archaeological notes on 10th–11th century trade in Hungary]', *Századok* 127 (1993), 450–68.
- 57 Mesterházy 1991 (n. 52), 150, 168–70.
- 58 Grigorov (n. 1).
- 59 One particular variant of the rings with a widening bezel, distributed in the Carpathian Basin, is entirely lacking from his maps (Grigorov's Type III.6; for their distribution in the Carpathian Basin, see Keszi [n. 51], 134), as is one type of crescentic earring (Grigorov's Type V.9; for their distribution in the Carpathian Basin, cf. n. 67): only five of the eight find spots in the Carpathian Basin appear on the map, Grigorov (n. 1), Obr. 84, 55.
- 60 Disregarding the 'classical' artefact types of the Conquest period.
- 61 This point is best illustrated by the fact that these artefacts were virtually omitted in their entirety from the catalogue accompanying the superb exhibition organised on the 1100th anniversary of the Hungarian Conquest in the Hungarian National Museum in 1996: see I. Fodor, L. Révész and M. Wolf (eds), *The Ancient Hungarians. Exhibition Catalogue*, Budapest, Magyar Nemzeti Múzeum, 1996.
- 62 Such as various wire ornaments and the S-terminalled lock-rings discussed in the above, which occur sporadically in the Balkans: see Grigorov (n. 1), Obr. 1, 41; Babić (n. 11), fig. 4.
- 63 The finds of this horizon were discussed by K. Mesterházy, 'Hacksilberfunde im Karpatenbecken', in G. Fusek (ed.), *Zborník na počesť Bariny Bialekovej*, Nitra, 2004, 235–50.
- 64 There is no recent study on Köttlach type artefacts in the 10th–11th century material from the Carpathian Basin.
- 65 L. Kovács, 'Fegyverek és pénzek [Weapons and coins]', in L. Kovács (ed.), *Honfoglalás és régészet*, Budapest, 1994, 181–94; *idem.*, 'Ami a

- zsákmányból megmaradt [What remained of the booty], in L. Veszprémy (ed.), *Honfoglaló őseink*, Budapest, 1997, 109–27; *idem.*, 'A kalandozások hadművészete és zsákmányának régészeti emlékei (Die Kriegskunst der ungarischen Streifzüge und die archäologischen Denkmäler ihrer Beute)', in L. Kredics (ed.), *Válásútton: pogányság-kereszténység, kelet-nyugat*, Veszprém, 2000, 223–37.
- 66 E.g. the finger-rings with widening bezels, of which 73 pieces were known from the Carpathian Basin in the mid-1990s: see Keszi (n. 51).
- 67 Páty, Grave 41: S. Tettamanti, 'A honfoglalás és államalapítás kora [The Conquest period and the foundation of the medieval Hungarian state]', in L. Simon (ed.), *Kincseink*, Szentendre, 2000/1, 23, fig. 19; Vattina (Vatin), Grave 1: S. Borovszky, *Temes vármegye* [The royal county of Temes], Budapest, 1896, 236; Gyula-Téglagyár grave 73 and a stray find: Mesterházy 1990 (n. 52), 94, Abb. 6.9 and K. Bakay, *Honfoglalás- és államalapítás kori temetők az Ipolymentén* (Gräberfelder an der Eipel aus der Zeit der ungarischen Landnahme und Staatsgründung) (Studia Comitatus 6), Szentendre, 1978, 179, Taf. LXIV.6; Kecel, Grave 1: N. Fettich, *Die Metallkunst der landnehmenden Ungarn* (Archaeologica Hungarica 21), Budapest, 1937, 259, Taf. CXVII.1–2; Sárrétudvari–Hízófold, Grave 136: I. Nepper, *Hajdú-Bihar megye 10–11. századi sírleletei II* (The 10th–11th century grave finds from County Hajdú-Bihar II), Budapest–Debrecen, 2002, 323, 192. kép, Szentes–Szentlászló, Grave 74: M. Széll, 'XI. századi temetők Szentes környékén (11th century cemeteries in the Szentes area)', *Folia Archaeologica* 3–4 (1941), VI. t. 13; Tiszaeszlár–Bashalom, Grave I/3: I. Dienes, 'Un cimetière de hongrois conquérants à Bashalom', *ActaArchHung* 7 (1956), Pl. 57.8; Szeghalom–Körháy: unpublished. For the latter earring and a general discussion of this earring type, see P. Langó, 'Crescent-shaped earrings with lower ornamental band', (in press).
- 68 Fettich (n. 67), taf. CXVII. 1–2.
- 69 The graves of this cemetery have still not been published in full. For a good photo of the bracelet, see Fodor *et al.* (n. 61), 190, figs 9–11. For a general description of the cemetery and its finds, see *ibid.*
- 70 J. Kovalovszki, 'A szarvasi honfoglaláskori ezüst karperec (Das Silberarmband von Szarvas aus der Zeit der Landnahme)', *Folia Archaeologica* 12 (1960), 173–82.
- 71 E.g. E. Kypraiou (ed.), *Greek Jewellery, 6000 Years of Tradition*, Athens, 1997, 230–3, cat. nos 282–5; A. Gonosová and C. Kondoleon (eds), *Art of Late Rome and Byzantium in the Virginia Museum of Fine Arts*, Richmond, Virginia Museum of Fine Arts, 1994, 74–7, cat. no. 18.
- 72 The cemetery and its graves were first published by N. Drandakes and N. Gkioles, 'Anaskafē sto Tigani tēs Manēs', *Praktika tēs en Athenais Archaiologikēs Etaireias* (hereafter *PrakArchEt*) (1980), 247–58; N. Drandakes, N. Gkioles and K. Konstantinides, 'Anaskafē sto Tigani Manēs', *PrakArchEt* (1981), 241–53; N. Drandakes and N. Gkioles, 'Anaskafē sto Tigani tēs Manēs', *PrakArchEt* (1983), 264–70. A description of the burials and a few select finds was published in German by C. Katsougianopoulou, 'Einige Überlegungen zum byzantinischen Friedhof in Tigani auf dem Peloponnes', in E. Pohl, U. Recker and C. Theune (eds), *Archäologisches Zellwerk. Beiträge zur Kulturgeschichte in Europa und Asien. Festschrift für Helmut Roth zum 60. Geburtstag* (Internationale Archäologie, Studia honoraria 16), Rahden, 2001, 461–9. A selection of the more remarkable finds and their colour photos can be found in Kypraiou (n. 71), but unfortunately without an indication of the grave numbers. Seeing that most of the grave goods are known only from their description, with photos available for a few only, Katsougianopoulou's assessment (*ibid.*, 465) is hardly an exaggeration: 'die Vorlage des Friedhofs in Tigani sehr summerisch geblieben ist. Leider ist dies kein Einzelfall, aus dem griechischen Gebiet in byzantinischer Zeit liegen zwar Zahlreiche Grabfunde bzw. Friedhöfe vor, doch sind diese in der Regel nur sehr knapp publiziert worden'.
- 73 Drauschke (n. 4), 317, noted this in connection with this cemetery.
- 74 L. Deriziōtēs and S. Kougioumtzoglou, 'Ἐπὶ περαιτέρῃ Τριπολιτῆς κατά τῆν παλαιοχριστιανικὴν καὶ byzantinῆν περίοδο (topografia – istoria – archaeologikēs anakalypseis)', *Thessaliko ēmerologio* 48 (2005), 140–1, eik. 9, 16–22.
- 75 Cf. for example Chania: J. Albani, 'In der Hoffnung auf ewiges Leben. Grabbeigaben aus der byzantinischen und nach-byzantinischen Sammlung in Chania/Kreta', in W. Hörsander, J. Koder and M.A. Stassinopoulou (eds), *Wiener Byzantinistik und Neogräzistik*, Vienna, 2004, 53–60; see also, Albani's study in the present volume.
- 76 A. Ödekan, 'The Remnants', 12th and 13th centuries. *Byzantine objects in Turkey*, Istanbul, 2007, 126–30.
- 77 *Ibid.*, 269.
- 78 Found at Tille Höyük: J. Moore, *Tille Höyük 1. The Medieval Period*, Ankara, 1983, fig. 55.3. (Unfortunately, an exact dating of the bracelet within the Middle Byzantine period is impossible owing to the lack of a stratigraphic context.)
- 79 From Amorium: C. Lightfoot and M. Lightfoot, *Amorium: an Archaeological Guide*, Istanbul, 2007, 149.
- 80 Ödekan (n. 76), 126–7.
- 81 *Ibid.*, 129–30.
- 82 A historical situation of this type can be envisioned in the broader region of the Carpathian Basin during the 9th century. The smaller centres emerging on the eastern fringes of the expanding Carolingian Empire in the Moravian Basin, Pannonia, and Dalmatia all had workshops catering to the needs of the local élite, producing artefacts in a similar style adapted to local taste. These workshops produced their own jewellery types during the Early Middle Ages, influenced in part by the repeated cultural impacts from the south: see B.M. Szöke, 'Die Beziehungen zwischen dem oberen Donautal und Westungarn in der ersten Hälfte des 9. Jahrhunderts (Frauentrachtzubehör und Schmuck)', in F. Daim (ed.), *Awarenforschungen I* (Studien zur Archäologie der Awaren 4), Vienna, 1992, 862–3. For the changing views concerning the origins of a particular jewellery type, see B.M. Szöke, 'Karolinger-zeitliche Gräberfelder I–II von Garabonc–Ófalu', *Antaeus* 21 (1992), 124–9 and *idem.*, 'New findings of the excavations in Mosaburg/Zalavár (Western Hungary)', in Henning (n. 49), 412–3.
- 83 T. Totev, *The Preslav Gold Treasure*, Sofia, 1982, 52–7.
- 84 Cf. n. 72. An excellent colour photo of the ring has been published in Kypraiou (n. 71), cat. no. 197. One exception is a paper by L. Bouras, 'Four enamel rings in the Benaki Museum, Athens, and an enamel ring from the Mani', in 'The seventh British Museum enamel colloquium, on materials and techniques of enamelling (1985), Résumé of papers', *Jewellery Studies* 3 (1989), 87. I would like to thank David Buckton for calling my attention to the latter paper and for sending me the above reference.
- 85 It is difficult to fit the artefact types from the Tigani cemetery into a chronological scheme. Most of the buckles are 6th–7th century examples of the 'Corinth' type. The buckle from Grave 52, which also contained the finger-ring, can be assigned to the buckle type with U-shaped buckle plate (no photo is available of this find), whose 8th century date cannot be excluded. This would fit in with the early 8th century date of the crescentic earring (cf. n. 86). (It must be noted here that the globules typical for earrings of the Middle Byzantine period can be clearly made out on the earring's hoop, but the piece itself has a hoop and hook fastener. This type of fastener, widespread during the Early Byzantine period, survived into the next period, although it was uncommon in the case of the crescentic type in question. It seems to me that this was a feature probably characterising the early pieces of the type.) It is uncertain how the date of the *cloisonné* enamelled finger-ring can be harmonised with the above: one possibility is that the U-shaped buckles were late pieces surviving into the early 9th century, another is that the finger-ring represents one of the earliest *cloisonné* enamelled jewellery pieces. Be that as it may, this issue can only be resolved with the publication of other cemeteries. What seems certain from the dominance of Early Byzantine artefacts and the almost complete lack of classical Middle Byzantine pieces is that Grave 52 can be assigned to the latest phase of the Tigani cemetery and dated to the beginning of the Middle Byzantine period. David Buckton believes that *cloisonné* enamelled jewellery began to be manufactured from around 800: cf. n. 87. While a break in the use of the cemetery cannot be excluded, there is nothing to indicate such an event.
- 86 For a photo of the earring, cf. Kypraiou (n. 71), 182, cat. no. 199 (with a dating to the 6th century, N.B. Drandakes). Antje Bosselmann-Ruickbie suggested a 9th–11th century date for the earring: see A. Bosselmann-Ruickbie, 'Mittelbyzantinische Ohrringe mit Filigran und Granulation', in Wamers (n. 9), 324. In her comment on my paper read at the conference, Yvonne Stolz mentioned that a similar earring, found in an 8th-century context, will be published in her doctoral dissertation. I would like to thank her for this piece of information.

- 87 D. Buckton, 'Enamelling on Gold. A historical perspective', *Gold Bulletin* 15 (1982), 105; *idem.*, 'The Oppenheim or Fieschi-Morgan Reliquary in New York, and the Antecedents of Middle Byzantine Enamel', in *8th Annual Byzantine Studies Conference. Abstracts and Papers*, 35–6, Chicago, 1982, 35–6; *idem.*, 'Byzantine Enamel and the West', *Byzantinische Forschungen* 13 (1988), 235–44.
- 88 For a photo and a description of the bracelet, see Evans and Wixom (n. 12), 243–4, cat. no. 165A (S.T. Brooks), with the earlier literature. **See also Yeroulanou, this volume, Pl. 25.**
- 89 Totev (n. 83), 40–3, 46–9, figs 6–7, 9, 11, 13 (necklace), 56–7, fig. 17 (earring).
- 90 D. Buckton (ed.), *Byzantium: Treasures of Byzantine Art and Culture from British Collections*, London, 1994, cat. no. 142 (D. Buckton). **See also Albani, this volume, Pl. 5.**
- 91 D. I. Blifeld, *Davn'orussky pam'jatniki Šestovicy*, Kiev, 1977, Tab. XXXII.1.
- 92 M. Petritakes in *Archaiologikon Deltion, Chronica* 42 (1987), 175, pin. 86; for the cemetery map, cf. *ibid.*, 174.
- 93 For a good overview of the earlier proposals for the date of basket earrings, see Gonosová and Kondoleon (n. 71), 83, 95, cat. nos 22, 30 (C. Kondoleon).
- 94 Some pieces were dated even earlier, to the 3rd century: cf. A. Yeroulanou, *Diatrita. Pierced-work gold jewellery from the 3rd to the 7th century*, Athens, Benaki Museum, 1999, 277–8, cat. nos 462–4. Yeroulanou correctly noted that 'it is difficult to include them among pierced-work jewellery because the true pierced-work surfaces are minimal. Many of the holes in the surfaces are actually formed from wire, that is from small links soldered together, while others were formed by perforating the metal' (*ibid.*, 74). The technical differences between genuine Early Byzantine *opus interrasile* and Middle Byzantine openwork jewellery are hardly surprising, given the many centuries between the two.
- 95 The pieces dated to the Early Byzantine period are without exception stray finds, whose dating to the 3rd–7th centuries lacks convincing arguments. More recently found pieces with secure contexts are all Middle Byzantine; as far as I know, earrings of this type have not been recovered from Early Byzantine burials in spite of the latter's higher number: see R.M. Harrison, *Excavations at Saraçane in Istanbul I*, Princeton and Washington, 1986, cat. no. 597 (from a layer dated by a mid-10th-century coin); M. Jenkins-Madina, 'Jewelry', in G.F. Bass *et al.*, *Serçe Limanı: An Eleventh-Century Shipwreck I*, Texas A&M University Press, 2004, 289–90 (from a ship dated by early 11th century coins); C. Lightfoot and E. Ivison, 'Amorium 2006', *Anatolian Archaeology* 12 (2006), 31. After finishing this manuscript, I came across Bossellmann-Ruickbie's article, which came to a similar conclusion concerning the Middle Byzantine date of the currently known basket earrings: see A. Bossellmann-Ruickbie, 'Byzantinisch, Islamisch oder 'Internationaler Stil'? Email- und Körbchenohrringe aus dem östlichen Mittelmeerraum', in U. Koenen and M. Müller-Wiener (eds), *Grenzgänge im östlichen Mittelmeerraum, Byzanz und die islamische Welt vom 9. bis 13. Jahrhundert*, Wiesbaden, 2008, 85–96.
- 96 The pieces from the Balkans and Anatolia are generally dated to the 10th century and later. An earlier use is suggested by A. Antónaras, 'Gyalina mesobyzantina brahiolai. Symbolēse themata diadosēs, paragōgēs, typologias kai hrēsēs (Middle Byzantine Glass Bracelets. Contribution to Issues of Distribution, Production, Typology and Use)', *Deltion tēs Christianikēs Archaiologikēs Etaireias* 27 (2006), 423–34. However, glass bracelets are rare finds in the Crimea before the mid-10th century and their widespread use can only be documented from the late 10th–early 11th century: V. V. Majko, *Srednekovye nekropoli Sudakskoj doliny*, Kiev, 2007, 120. Bulgarian research too dates the type to the 10th century (B.D. Borisov, *Djadovo. Bulgarian, Dutch, Japanese Expedition I. Medieval Settlement and Necropolis (11th–12th Century)*, Tokyo, 1989, 292–3), while the pieces from Macedonia are generally assigned to the 11th century (E. Taleska, 'Prilog kon proučuvanje na srednovekovni belezici od staklovina na teritorijata na SR Srbija, SR Makedonija i NR Bulgarija (Contribution to the investigation of the medieval glass bracelets on the territory of Serbia, Macedonia and Bulgaria)', in M. Apostolski (ed.), *Zbornik posvetenei na Boško Babić*, Prilep, 1986, 215–21). A large number of well-dated pieces have recently been published from Amorium: M.A.V. Gill, *Amorium Reports, Finds I. The glass (1087–1097)* (BAR International Series 1070), Oxford, 2002.
- 97 For a brief overview of the earlier literature, see Borisov (n. 96), 290–3.
- 98 Ödekan (n. 76), 263–5 and Gill (n. 96).
- 99 One such bracelet was found in Grave 2 at Ludányhalászi–Apáti puszta: S. Pintér, 'Nógrádvidéki régészeti kutatásokról [Archaeological investigations in the Nógrád region]', *Archaeologiai Értesítő* 7 (1887), 431. I would to thank Péter Langó and László Kovács for calling my attention to this piece.
- 100 I. Bóna, *Dunapentele története a honfoglalástól a 19. század közepéig a már eddig ismert, valamint újonnan bevont adatok alapján* [History of Dunapentele from the Conquest period to the mid-19th century], Dunapentele, 1997 (2nd ed.), 3 kép; Mesterházy (n. 63), Abb. 4. 1–2.
- 101 Mesterházy 1991 (n. 52), 156, fig. 6.
- 102 Byzantine archaeology as an independent field of research is hardly a well-established discipline: while several other fields of research overlap with it, none of them correlate precisely with what Byzantine archaeology should be about. Christian archaeology, focusing predominantly on the archaeology of buildings, does not include several areas of interest, and seems uncertain regarding its self-definition: see H.R. Seeliger, 'Christliche Archäologie oder spätantike Kunstgeschichte? Aktuelle Grundlagenfragen aus der Sicht der Kirchengeschichte', *Rivista di archeologia christiana* 61 (1985), 167–87. Late Antique archaeology, the other advanced field of research, while definitely witnessing a thematic explosion (reflected by the series of conferences and publications of more recent years), merely encompasses the study of the Early Byzantine period. One welcome advance is the birth of a forum dedicated to the archaeology of the Middle Byzantine period (<http://www.byzarch.bham.ac.uk/intro.htm>). Still, a number of issues raised in the 1970s and 1980s remain unresolved: see Rosser (n. 34); T.E. Gregory, 'Intensive Archaeological Survey and its Place in Byzantine Studies', *Byzantine Studies/Études Byzantines* 13 (1986), 155–75; D.W. Rupp, 'Problems in Byzantine Field Reconnaissance: A Non-Specialist's View', *Byzantine Studies/Études Byzantines* 13 (1986), 177–88; M.L. Rautman, 'Archaeology and Byzantine Studies', *Byzantinische Forschungen* 15 (1990), 137–65. The problems of 'Byzantine archaeology' are presented from an East Central European perspective with a focus on the artefacts of everyday life by M. Wołoszyn, 'Byzantine Archaeology – selected problems', *Analecta Archaeologica Ressorviensia* 1 (2006), 259–89.
- 103 For a brief analysis of Slavic archaeology employing also the criteria of western research, see Curta 2001b (n. 15), 6–27; F. Curta, 'From Kossinna to Bromley: Ethnogenesis in Slavic Archaeology', in Gillett (n. 14), 201–18. For an overview of Slavic archaeology in the Balkans, see the studies of Miklós Takács quoted in n. 32.
- 104 D. Obolensky, *The Byzantine Commonwealth. East Europe, 500–1453*, London, 1974; for a broader perspective, see G. Fowden, *Empire to commonwealth: consequences of monotheism in Late Antiquity*, Princeton, 1993.

Byzantine Jewellery: The Evidence from Byzantine Legal Documents

Maria G. Parani

Recourse to written sources in order to elucidate aspects of Byzantine material culture constitutes a valid method of enquiry often adopted by archaeologists and art-historians, especially those whose interests lie in areas for which there is little or inconclusive archaeological documentation. In the case of artefact categories amply attested in the archaeological record the written evidence can and has been fruitfully quarried for complementary information on typology and technology, production and distribution, function and meaning.¹ In the field of Byzantine jewellery studies the usefulness of this approach was demonstrated, over 20 years ago, by the work of Hetherington² on the ownership and distribution of Byzantine enamels. Hetherington's early recognition of the potential of Byzantine legal documents in Byzantine material culture studies needs to be acknowledged, especially as it predates the work of the late Nicholas Oikonomides that has made this body of evidence widely known to archaeologists and art historians. In his seminal study on the contents of middle-class Byzantine households based on legal documents of the 11th to the 15th centuries, Oikonomides³ dedicates half a paragraph to jewellery, noting that it was found in all types of households, where it primarily functioned as an investment. A closer and more systematic examination of these documents reveals that there is much more and varied information to be gleaned from them.

What follows constitutes a sample of the work being carried out as part of a larger collaborative project entitled 'Realia in Byzantine legal documents,' undertaken in association with Jean-Michel Spieser of the University of Fribourg, Switzerland, and Brigitte Pitarakis of the CNRS, France. The project aspires to contribute to the study of daily life in Byzantium by collecting in the form of an electronic database, interpreting, and commenting on references to secular and religious artefacts encountered in Byzantine public and private acts, as well as in monastic foundation documents.⁴

The time frame of the present enquiry, that is from the 11th to the middle of the 15th century, is imposed by the dates of the documents that have survived, either in their original form or as copies in Byzantine and post-Byzantine chartularies. From a body of around 210 documents mentioning or describing artefacts, identified by a survey of published collections of Byzantine legal documents known to the author, references to jewellery, in which are also included belts with metal adornments, are encountered in 42. Because of accidents of survival, this sample is biased in terms of its chronological and geographical coverage, with some periods and areas being over-represented, while others hardly feature in it at all. Numerically, the 11th century is represented by only 2 documents, the 12th by 4, the 13th by 6, the 14th by 19, and the first half of the 15th century by 11. Furthermore, 12 of these 42 documents date to the period of the Ottoman siege of

Constantinople, between the years 1394 and 1402, which resulted in an increase in the number of property-related cases being settled by the patriarchal court and recorded in the patriarchal register.⁵

In terms of content, the documents that concern us here include monastic and church inventories, inventories of private property, wills, marriage contracts, deeds of sale or donation, court decisions mainly on property-related disputes, and, in one case, an imperial letter addressed to a Russian ruler. Two documents speak generally of κόσμια (*kosmia*), jewellery, without going into any detail,⁶ while 29 mention just one specific item – a ring, a belt, a necklace, a pair of earrings and so forth. The remaining 11 contain references to more than one type of jewellery. References to individual items are sometimes accompanied by short descriptions, providing information on materials, decoration and decorative techniques, size, weight, price and, rarely, age and provenance. The nature of the information provided in each case and the degree of detail varies, depending on the transaction being recorded. Thus, in cases where a piece of jewellery features in a financial dispute we are often given only its price. On the other hand, in wills and inventories where more than one item of the same type is listed, the descriptions tend to become more detailed in order for individual items to be readily and securely identifiable.

Among the pieces of jewellery most often listed in acts relating to the property of private individuals of both sexes are δακτύλια (*daktylia*) or δακτυλίδια (*daktylidia*), rings. When the material is indicated it is either gold or silver. References to rings occur in 13 documents, all dated to the Late Byzantine period (Table 1).

Table 1. Rings in Byzantine legal documents

Miklosich and Müller, no. 23 ⁷	1255	4 gold rings
Ouspensky and Bénéchévitch, no. 86 ⁸	1272	1 ring
Prinzing, no. 82 ⁹	13th cent.	1 gold ring
Živojinović, Kravari and Giros, no. 30 ¹⁰	1314	2 gold and 2 silver rings
Bompaire <i>et al.</i> , no. 64 ¹¹	1325	22 gold rings
Bénou, no. 60 ¹²	1334	3 gold rings
Ferrari Dalle Spade, no. 10 ¹³	c. 1365	2 gold rings
Theocharides ¹⁴	1366/7	1 gold ring, old
Oikonomides, no. 49 ¹⁵	1384	7 rings, 1 with glass inset
Miklosich and Müller, no. 524 ¹⁶	1399	2 gold rings
Miklosich and Müller, no. 591 ¹⁷	1400	1 gold ring
Miklosich and Müller, no. 612 ¹⁸	1400	rings
Miklosich and Müller, no. 652 ¹⁹	1401	3 rings

It would seem that most households owned more than one precious ring, usually two or three. At the higher end of the social scale, the *pansebastos sebastos skouterios* Theodore Sarantenos from Berroia, a wealthy member of the provincial aristocracy of Byzantine Macedonia, who had been to Constantinople in the service of the emperor and who wrote his will in 1325, owned 22 gold rings. One of these, weighing 5 ἔξᾱγια (*exagia*), that is 22.2g, he bequeathed to his grandson and adopted son Theodore. Maria Deblitzene, living in Thessaloniki in the second half of the 14th century, had received as part of her marital gift six rings, valued at 10 ὑπέρπυρα (*hyperpyra*), gold coins, altogether, while her husband owned a ring with a glass-paste inset, μετὰ ὑελίου (*meta hyeliou*), valued at 1.5 *hyperpyra*. However, as attested by a number of documents dated to the 13th and the 14th centuries, rings made of precious metals could be found in less affluent households as well, located outside the major urban centres of the Empire.

Another type of object that is also often mentioned is the ἐγκόλπιον (*enkolpion*), a neck-pendant adorned with a sacred image.²⁰ References to *enkolpia* occur in 14 documents throughout the period under consideration (Table 2).

Table 2. *Enkolpia* in Byzantine legal documents

Lefort <i>et al.</i> , no. 47 ²¹	1098	2 <i>enkolpia</i> -reliquaries
Lemerle <i>et al.</i> , no. 7 ²²	1142	3 <i>enkolpia</i> -reliquaries
Petit, 63 ²³	1152	1 <i>enkolpion</i>
Astruc, 20, 21 ²⁴	1200	5 <i>enkolpia</i> , 1 a reliquary
Miklosich and Müller, no. 23 ²⁵	1255	1 silver <i>enkolpion</i>
Živojinović <i>et al.</i> , no. 30 ²⁶	1314	2 silver <i>enkolpia</i>
Hunger and Kersten, no. 11 ²⁷	1315	<i>enkolpia</i>
Hunger and Kersten, no. 168 ²⁸	1347	1 <i>enkolpion</i> -reliquary
Hunger and Kersten, no. 156 ²⁹	1350	1 <i>enkolpion</i>
Theocharides ³⁰	1366/7	2 <i>enkolpia</i>
Lemerle, no. 36 ³¹	1378	1 <i>enkolpion</i>
Oikonomidēs, no. 49 ³²	1384	1 silver <i>enkolpion</i>
Miklosich and Müller, no. 403 ³³	1389	<i>enkolpia</i>
Miklosich and Müller, no. 464 ³⁴	1394	<i>enkolpia</i>

They formed part of the property of private individuals – men and women, ecclesiastics, monastics and laymen – as well as monasteries. In monastic inventories *enkolpia* are listed with the icons, unless they enclosed a relic, in which case they appear under the heading of reliquaries. In 1142, the small Monastery of Xylourgou on Mount Athos owned three *enkolpia* enclosing holy relics. One was made of copper, the second of copper with a silver revetment, while the third was silver-gilt with enamel decoration and a suspension ring or chain adorned with two pearls. The latter, which was shaped as a triptych and contained three pieces of the Holy Cross, had been donated to the monastery by a monk named Lazarus.³⁵ The Monastery of St John the Theologian on Patmos in 1200 had five *enkolpia* in its possession. Four were listed among the icons. The two most precious of these were made of silver-gilt and bore enamel decoration. The first was adorned with an image of the Crucifixion and the second, which was round, with the Virgin and Child. The remaining two, also enamelled, one depicting the Virgin and Child and a second small one with

the Dormition, are listed among the icons in the cell of the abbot. The fifth example in the Patmos inventory, known as the ‘*enkolpion* of Iasites,’ after the late 11th–early 12th-century abbot of the monastery of that name, was included amongst the reliquaries as it contained a piece of the Holy Cross and other assorted relics.³⁶

Private individuals could also own more than one *enkolpia*, which they might have worn on different occasions or may have received as gifts. Thus, in the late 11th century, the nun Maria, formerly the *kouropalatis* Kale Pakouriane, a wealthy member of the Constantinopolitan aristocracy, owned two *enkolpia*, a gold one containing a relic and weighing 24 *exagia*, and another one in the form of a triptych, also enclosing a relic. She bequeathed both of them to two monks of her acquaintance.

In terms of the forms of *enkolpia* mentioned in the texts, three types are attested: those shaped like a triptych, round ones, and cross-shaped ones. It was a cross *enkolpion* with a piece of the Holy Cross and the relics of four martyrs that the emperor John VI Kantakouzenos sent as a gift in 1347 to the Russian ruler Simeon Ivanovič Gordyj, for the protection of the latter’s soul and body we are told. References to crosses are often encountered in the documents examined here, but it is not always possible to assert that they were pendants, even when they are described as being small. One likely candidate is the small, copper double cross, containing a relic, mentioned in the Patmos inventory, the description of which brings to mind the copper-alloy reliquary crosses that have come down to us in great numbers from the Middle Byzantine period.³⁷ A second possibility is the small cross, σταυρήν (*stauren*), given by the *koubouklesios* Stephanos of Hierissos (in the Chalkidiki) to his daughter, the nun Maria, along with a number of household effects, in 1017.³⁸ It is tempting to see in the adjective ‘κροίων’ (*kroion*) that describes the cross a misspelling of ‘κρύον’ (*kryon*), meaning ‘rock-crystal’. That the spelling of this document is on the whole very poor lends plausibility to such an assumption. Extant pendant crosses made of rock-crystal are very rare and, to my knowledge, date to the Early Byzantine period.³⁹ If the hypothesis put forward here is correct, then this reference could constitute testimony to the existence of comparable rock-crystal crosses at a much later date.

In addition to *enkolpia*, another type of neck ornament mentioned in our texts, albeit rarely, is the τραχηλέα (*trachelea*) or τραχηλαία (*trachelaia*) or τραχήλιον (*trachelion*), a necklace. In two cases, the necklace is bequeathed by the father to a son, while in a third it is given as a marital gift to the bride by the groom’s father, who had acquired it from his wife.⁴⁰ It cannot be determined whether both men and women would have worn this type of ornament. Nonetheless, it seems to have been an expensive item, which would have constituted a good investment, even if one did not actually wear it. The example bequeathed in 1255 by the monk Maximos Planites in western Asia Minor, to one of his sons was adorned with pearls,⁴¹ while the *trachelaia* that formed part of the paternal inheritance of Michael Mikrokephalos at Constantinople in 1401 was worth 90 *hyperpyra*.⁴²

The most expensive items listed in the documents, however, belong to a different category, that of the so-called κατασειστά (*kataseista*). Secure references to this type of jewellery occur in four documents dated to the 14th and the

15th centuries.⁴³ The *kataseista* appear to have been feminine ornaments. In Thessaloniki during the second half of the 14th century, Maria Deblitzene owned *kataseista*, which together with a *κατακλειδίων* (*katakleidion*), a type of brooch, were valued at 154 *hyperpyra*.⁴⁴ The *kataseista* that formed part of the dowry of the wife of Michael Palaiologos, a relative of the Byzantine emperor Manuel II Palaiologos, cost 220 *hyperpyra*, while those of the wife of her brother-in-law were pawned in 1401 for 150 *hyperpyra* and the money used to buy a plot of land.⁴⁵ In Constantinople at the beginning of the 15th century, a small field cost 160 *hyperpyra* and a vineyard, 120.

But what were these *kataseista*? Apart from a reference to some of them being adorned with jewels and pearls, we have no indication in the texts as to their appearance. Given that the verb ‘σειώ’ (*seio*), from which the word ‘σειστός’ (*seistos*) is derived, means ‘to shake’, the editors of the relevant documents have suggested that the *kataseista* were some kind of hanging ornament. When the term occurs in association with crosses, as it does in the inventory of the Constantinopolitan monastery of the Theotokos Kecharitomene in the early 12th century,⁴⁶ it is interpreted as referring to ornaments suspended from the lower edge of the horizontal arm of the cross, as seen on some extant Early and Middle Byzantine examples.⁴⁷ In the case of female jewellery, it should probably be interpreted as referring to pendants comparable to the *πρεπενδούλια* (*prependoulia*) suspended from the crown of the empress.⁴⁸ The association with the imperial *prependoulia*, suggested by Oikonomides,⁴⁹ is supported by the earliest known occurrence of the term in the *De cerimoniis*, where there is mention of the two *kataseista* of the empress.⁵⁰ The *kataseista* should be distinguished from earrings, since the established Byzantine term for the latter, *σχολαρίκια* (*scholarikia*), occurs in the Deblitzene document, immediately after the description of the *kataseista* adorned with jewels and pearls.⁵¹ That comparable pendant ornaments did form part of the adornment of Late Byzantine ladies is amply attested by the archaeological and the artistic records.⁵²

Moving on to earrings, references to *σχο(υ)λαρίκια* (*scho(u)larikia*) or *σκολαρίκια* (*skolarikia*) are encountered in six documents, all dated to the Late Byzantine period (Table 3).

Table 3. Earrings in Byzantine legal documents

Miklosich and Müller, no. 23 ⁵³	1255	2 pairs, 1 without pearls
Ouspensky and Bénéchévitch, no. 82 ⁵⁴	1265	1 pair
Hunger and Kresten, no. 74 ⁵⁵	1324	1 pair
Ferrari Dalle Spade, no. 10 ⁵⁶	c. 1365	3 pairs, of gold
Oikonomides, no. 49 ⁵⁷	1384	1 pair, with pearls and gems
Miklosich and Müller, no. 632 ⁵⁸	1401(?)	1 pair

Apparently, members of both sexes owned them, but whether they both actually wore them is a different question. Though there is evidence that certain men and eunuchs did wear earrings in Byzantium,⁵⁹ I am sceptical about including in it the testimony of our documents on male ownership, given that we do not always know how these men came to possess them. Some may have inherited the earrings from female relatives, as was the case of a brother inheriting the earrings of his sister recorded in a document of 1401 (?). Alternatively, men

might have received earrings as payment for a transaction, as did a certain George, in the region of the Pontos, who in 1265 received a pair of earrings worth 14 *ἄσπρα* (*aspra*), silver coins, as payment for the sale of a field. The earrings recorded in our documents appear to have been valuable and would have served as an investment as well as an ornament. In 1255, Maximos Planites, a monk of the Monastery of Lembos near Smyrna, had in his possession two pairs of earrings – one large and the other without pearls – which he bequeathed to one of his two sons; Planites did not have a daughter. There is no indication in our texts as to the types of earrings in question, though their size and material, especially when incrustated with gems and pearls, is sometimes indicated. Maria Deblitzene, of whom we have spoken before, was to receive from her late husband's estate a pair of large earrings, adorned with assorted jewels and big pearls, valued at 48 *hyperpyra*.

What of bracelets? Despite the popularity of this type of ornament during the period under consideration, unequivocally attested in the archaeological record,⁶⁰ references to *βραχιόνια* (*brachionia*) or *βραχιόλλια* (*brachiollia*) are very rare, occurring in only three of our documents.⁶¹ In the 14th century, for instance, one Theodore was to receive silver bracelets weighing 19 *exagia* and valued at four *hyperpyra* as dowry goods.⁶² However, the most interesting information regarding bracelets comes from the will of Kale Pakouriane, mentioned earlier, in the late 11th century.⁶³ Apparently this wealthy lady owned at least four examples made of gold: a pair of wide bracelets with enamel decoration, which she bequeathed to her sister, the *proedrisa* Maria, one bracelet made of twisted wire with enamelled finials, bequeathed to the nun Elene Diaksene, and yet another also made of twisted wire and weighing around 693g, to be given to the brothers of the hospice of Hosios in Constantinople. Hetherington⁶⁴ has already drawn the comparison between Pakouriane's wide enamel bracelets and the famous examples from Thessaloniki.⁶⁵ As for the gold bracelets made of twisted wire, they bring to mind the example in the Hélène Stathatos Collection, today in the National Archaeological Museum of Athens, dated to the 11th century.⁶⁶

Brooches that would have been used to secure male and female mantles either at the shoulder or over the breast are seldom mentioned in our texts. The *katakleidion* listed along with the *kataseista* of Maria Deblitzene in 1384 was probably one such brooch, meaning as it does ‘at the collarbone’.⁶⁷ A second term that could refer to brooches or clasps is ‘κομποθηλεία’ (*kompotheleia*) or ‘κομποθυλέα’ (*kombothylea*) encountered in two Late Byzantine documents. The often-mentioned monk Maximos Planites owned one made of gold,⁶⁸ while in 1334 Philippos Arabantenos from the area of Serres owned three examples, two of gold and one silver-gilt.⁶⁹ That this term should be understood as meaning some sort of clasp or brooch is suggested by its affinity to the terms ‘κομποθήλυκον’ (*kompothelykon*) and ‘κομποθήκη’ (*kompotheke*), which occur in descriptions of the luxurious bindings of Byzantine manuscripts and are interpreted as the clasps securing the front and the back cover when the codex was closed.⁷⁰ Lastly, in the will of Theodore Sarantenos of the 22 gold rings, there is a reference to two golden *πούκλαι* (*pouklai*) adorned with jewels and pearls.⁷¹ The term, derived from the medieval latin ‘buc(c)ula’ or the French ‘boucle’, could

be referring to brooches or, even, to belt-buckles, which brings us to the final category to concern us here, namely belts, either made of metal or, more likely, of leather or fabric with metal attachments (Table 4).

Table 4. Belts in Byzantine legal documents

Miklosich and Müller, no. 23 ⁷²	1255	1 silver belt
Živojinović <i>et al.</i> , no. 30 ⁷³	1314	1 silver-gilt belt
Bompaire <i>et al.</i> , no. 64 ⁷⁴	1325	6 silver-gilt belts
Miklosich and Müller, no. 612 ⁷⁵	1400	belts
Miklosich and Müller, no. 584 ⁷⁶	1400(?)	1 belt
Miklosich and Müller, no. 591 ⁷⁷	1400	1 Frankish belt
Miklosich and Müller, no. 639 ⁷⁸	1401(?)	1 belt

Unambiguous references to such belts are encountered in three documents, while in one other instance we can safely infer that the belt concerned falls under this category. I am referring to a Frankish belt mentioned in a patriarchal act of 1400 that was valued at 50 *hyperpyra*. Its high price implies that it was adorned with precious metal attachments, perhaps similar in appearance to the western-style belt-fittings of the Chalcis treasure from Euboea, dated to the late 14th or early 15th century.⁷⁹ The designation of this belt as ‘φραγγικόν’ (Frankish) is noteworthy as it attests to the circulation, if not production, of western-style jewellery and accessories in Late Byzantine Constantinople.⁸⁰

Much cheaper than this Frankish belt was the silver-gilt belt of Theodore Karavas from Thessaloniki in the early 14th century, which cost only 8 *hyperpyra*. On the other hand, Theodore Sarantenos in 1325 owned six belts, all with silver-gilt belt-fittings and two of which were gold-embroidered. The most expensive was a belt worth 60 *hyperpyra* that had not been worn. That this was a prized possession is attested by Sarantenos’s description of its adornments as ‘beautiful’, a very rare occurrence in the usually dry language of legal documents. Sarantenos’s description of his belts is also interesting in that it indicates the use of two different types of metal attachments for the belts, the *στυλοι* (*styloi*) and the *φόλαι* (*pholai*). The first should probably be understood as referring to vertical elements, the second to circular ones. Both types of attachments can be seen adorning the belts of Byzantine dignitaries and aristocrats in Late Byzantine portraits.⁸¹ In one case the *styloi* are described as ‘ancient’, implying that precious metal attachments could be saved and used again when their original mount had become worn with age and use. We are not told how Sarantenos came by his belts. Perhaps some he had bought, while the ‘heavy ancient one’ could have been a family heirloom. In any case, these belts, listed first among his personal possessions, serve above all else as an index of his high social status and great wealth.

Having looked at the types of jewellery mentioned in Byzantine legal documents, let us now consider the materials out of which the listed items are made and the techniques used in their manufacture. As far as materials are concerned, the majority of the items listed are made of gold. The standard Greek term for gold encountered in documents of all periods is ‘χρυσός’ (*chrysos*). However, from the 13th century onwards a second term appears which is also interpreted as meaning ‘gold’. This is the word ‘μάλαγμα’ (*malagma*) and its derivatives

‘μαλαγμάταινον’ (*malagmataionon*), ‘μαλαγματηνόν’ (*malagmatenon*) or ‘μαλαγματηρόν’ (*malagmateron*). The medieval word is ultimately derived from the ancient Greek ‘μάλαγμα’, meaning softening substance or emollient. However, a careful look at our documents indicates that *chrysos* and *malagma* are not interchangeable (Table 5).

Table 5. Malagma in Byzantine legal documents

Miklosich and Müller, no. 23 ⁸²	1255	3 gold rings and another large one of <i>malagma</i>
Ferrari Dalle Spade, no. 10 ⁸³	c. 1365	3 pairs of earrings, 1 of <i>malagma</i> and 2 of gold, and 2 rings, 1 of <i>malagma</i> and the other gold
Miklosich and Müller, no. 524 ⁸⁴	1399	2 rings of <i>malagma</i>
Miklosich and Müller, no. 591 ⁸⁵	1400	1 ring of <i>malagma</i>

Though the distinction between the two terms is clear enough, its substance is not. Could they be referring to gold of different colour or fineness? Considering the meaning of the ancient Greek ‘μάλαγμα’, the Byzantine *malagma* may be denoting gold of a high standard of purity, which is softer and more malleable. According to the documents considered here, *malagma* was used for rings and earrings, in which case the inherent softness of gold of high purity would not have been problematic, if this is what the term stands for. Indeed, support for this hypothesis is provided by another Byzantine document, namely the monastic rule of the Convent of the Mother of God of Sure Hope in Constantinople, dated to 1327–35, where, among other donations, is mentioned an ‘oil vessel of pure gold, which is called *malagma*’.⁸⁶

However, even if we accept that *malagma* refers to gold of high purity, the question still remains as to why this distinction was introduced during the 13th century, as our documents seem to suggest, and how an ancient Greek term, which had been used in medicinal rather than metallurgical contexts, resurfaced centuries later and with a different meaning. Could this be an indication of a change in the practices of, or the technology employed by, Byzantine goldsmiths, possibly under some non-Byzantine influence? In this respect, it is very tempting to see some relation between the Byzantine *malagma* and the Latin ‘amalgama’, that is amalgam, an alloy of mercury with some other metal. In the 12th century, the German monk Theophilus in his treatise *On Divers Arts* speaks of the process of amalgamation for extracting gold from the ore and for purifying gold.⁸⁷ However, at present it has not been possible to trace the Latin term, ‘amalgama’, prior to the 15th century and thus the question of a possible connection between Byzantine *malagma* and western practices must remain open. As things stand, what we can claim on the basis of our documentary evidence is that in the Late Byzantine period gold of two different known standards was employed for the manufacture of gold jewellery. It is only hoped that further research into the etymology of the Byzantine Greek and the Latin terms, as well as elemental analyses of Late Byzantine gold jewellery, will provide answers to the questions raised by the documents.

Apart from gold, silver also features in our documents. There are only three items made of copper-alloy, one revetted with silver, and all three are *enkolpia* containing relics. As

discussed above, there is also one possible reference to a cross made of rock-crystal. Other materials include pearls, precious or semi-precious stones, λιθάρια (*litharia*), which, however, are never specified, and in one instance, glass-paste. Regarding the decorative techniques attested in our documents, these include, as we have seen, the use of twisted gold wire, gilding of silver, encrustation with pearls and gems, the revetment of copper with silver, and enamelling.

The occurrence of the latter technique in some of our documents has already been discussed by Hetherington.⁸⁸ However, there is one point that seems to me in need of further clarification. The Byzantine technical term for enamel is ‘χείμευσις’ (*cheimeusis*), ‘χείμευτός’ (*cheimeutos*) for enamelled. When Kale Pakouriane speaks of her three gold bracelets with enamelled decoration, the obvious assumption is that the enamel was executed on a base of gold. In the case of one of the Xylourgou Monastery *enkolpia* and two others from Patmos, which are all described as silver gilt with enamel decoration (ἀργυρὸν διάχρυσον ... τὸ ὥλον με τὴν χήμεψιν [*sic*]; ἀργυρᾶ διάχρυσα χείμευτά). Again the assumption, based on comparisons with extant Middle Byzantine examples,⁸⁹ is that these must have consisted of gold enamel plaques set in silver-gilt containers, rather than enamels executed directly onto a silver-gilt base.

What is puzzling, however, is the description of the third Patmos *enkolpion* as ‘ἀργυροχείμευτον’ (*argyrocheimeuton*), especially when juxtaposed with that of the great icon of St John the Evangelist in the same inventory, the halo and gospel-book of which were revetted with metal and are described as ‘χρυσοχείμευτα ἀργυρ’ (*chrysocheimeuta argyra*). In the latter case it is, I think, safe to assume that the reference is to gold enamel plaques set in silver. But then, what of the first term? If ‘χρυσοχείμευτος’ (*chrysocheimeutos*) means ‘enamelled gold,’ then ‘ἀργυροχείμευτος’ (*argyrocheimeutos*) should mean ‘enamelled silver’. It is well-known that silver was particularly difficult to enamel because of adhesion problems and the fact that the coefficients of expansion of the metal and the enamel differ widely.⁹⁰ Still, enamellers in the West would occasionally use silver, as attested by some very rare early examples. One may mention the lower book-cover of the Lindau Gospels (Ms. M.1) in the Pierpont Morgan Library, New York, dated to the second half of the 8th century,⁹¹ as well as the so-called cross of Pope Paschal I (817–24), today in the Museo Sacro in the Vatican, which, according to David Buckton (pers. comm.), was executed in silver *cloisonné* enamel, though the silver has oxidized.⁹² Furthermore, Ogden⁹³ has adduced some written evidence for the use of silver by western enamellers in the 14th century. That Byzantine enamellers also experimented with this medium is attested by two 12th-century enamel plaques, one representing the Virgin and the other St John the Theologian, today in the Metropolitan Museum of Art in New York.⁹⁴ According to conservator Pete Dandridge (pers. comm.), the two plaques, which probably originated from the same object, have a silver base and cloisons with the exposed surfaces gilt. In the light of this discussion, the Patmos *enkolpion* can now be added to the small group of rare witnesses to western and Byzantine enamellers’ occasional use of silver when practicing their art.

The bias of our documents towards precious substances and expensive decorative techniques becomes immediately

apparent. In acts related to property disputes it is not surprising to find that the items contested are made of precious materials and hence of a monetary value that justified going to court over. Similarly, in other types of documents where we find jewellery functioning as an asset or being presented as a gift to a religious foundation or an individual esteemed in the donor’s eyes, the prominence of precious examples is also to be expected. But how does one interpret the lack of references to jewellery made of cheaper materials in inventories of movable property belonging to private individuals or in wills? Does it mean that the persons concerned did not own such items or, simply, that such items were not recorded? And why would they not be recorded?

Before attempting to address these questions, perhaps I should mention that just as in the case of jewellery we hardly ever hear of copper-alloy or glass in our texts, so in the case of household effects, though silver and bronze vessels are regularly listed, there is hardly ever any mention of ceramic wares, the presence of which is ubiquitous in archaeological contexts. I am inclined to think that part of the answer may be found in perceptions of what constituted wealth in Medieval Byzantium and in the culturally-conditioned hierarchy of materials observable within various artefact categories.⁹⁵ In my view, the fact that bronze and glass jewellery is not recorded could be understood, at least in part, as an expression of the traditional mind-set that placed a relative low value on such items in comparison with ornaments made of gold and silver and encrusted with gems and pearls. It is perhaps not a coincidence that the only references to copper-alloy items that we have concern pendant reliquaries, where value was primarily a function of their sacred content and not of the material out of which they were made.

As far as wills are concerned, there is an additional consideration to be kept in mind. One example will suffice. In her will of 1098, Kale Pakouriane mentions only two *enkolpia* and four bracelets, all in relation to specific bequests. It is hard to believe that a wealthy aristocratic woman – who, incidentally, owned at least six expensive mantles, implying that she must have appeared in public often – did not have in her possession other jewellery, precious or otherwise. In fact, she herself admits in her will that she had other movable possessions that are not itemised. According to Byzantine law possessions that were not mentioned in the will would still be inherited by the legal heirs of the deceased.⁹⁶ In other words, there was no overriding legal reason to be thorough. What the testator chose to mention was, therefore, dictated by the unwritten rules of social convention, notarial practices, and personal considerations. What we can deduce from all this, then, is that the surviving lists of jewellery are not always exhaustive and that the absence of references to jewellery made of cheaper materials in our documents does not necessarily mean that the households concerned did not own any.

Still, although not exhaustive, some lists upon closer examination appear to be comprehensive, giving a fair idea of the sort of precious jewellery that one might encounter in middle- and upper-class Byzantine households of the period under consideration. Thus, Maximos Planites, who composed his will in 1255 as a monk of the Monastery of Lembiotissa near Smyrna, but who may have been a soldier in the past, owned

two pairs of earrings – one large-sized and the other without pearls, one gold brooch or clasp, a necklace adorned with pearls, four gold rings, one silver *enkolpion*, and one silver belt. Although not particularly wealthy, he seems to have been comfortably well-off before he entered the monastery and the catalogue of the jewellery in his possession, including some items he may have inherited from his deceased wife, is a reflection of this.

In 1384 the widow Maria Deblitzene went to court in Thessaloniki, to ensure her possession of her dowry and the marital gift she had received from her late husband, Manuel, and to have restored to her the value of those of her goods that had been liquidated, spent or devalued through usage. The tribunal's officers made a detailed and comprehensive inventory of the household effects of the Deblitzenoi, although again certain items, like ceramic vessels, were apparently omitted. From her dowry, Maria still had the brooch and the *kataseista* valued at 154 *hyperpyra*, though the six rings of her marital gift were gone. The material of the rings is unfortunately not specified, but they had been relatively cheap, at around 1.5 *hyperpyra* each. From her husband's estate Maria was to receive one silver *enkolpion* worth 2 *hyperpyra*, a ring with a glass inset valued at 1.5 *hyperpyra*, *kataseista* with jewels and pearls worth 36 *hyperpyra*, and a pair of great earrings with jewels and large pearls valued at 48 *hyperpyra*. Manuel had been a widower when he married Maria and some of the feminine ornaments in his possession may have come to him through his late first wife. The absence of any reference to bracelets is noteworthy. Still, the jewellery that is recorded seems to give a fair impression of the items one would expect to find in the possession of a middle-class urban household.

Theodore Sarantenos, on the other hand, belonged to a different social category and the jewellery mentioned in his will of 1325 amply demonstrates this. As we have already seen, the *skouterios* owned 6 expensive belts, 2 brooches or buckles with precious stones and pearls, 22 gold rings, as well as 42 buttons of two different types, an unspecified quantity of pearls, and ἀναδέται (*anadetai*), possibly hair-bands, adorned with 5 gems and 20 pearls. Since Late Byzantine men, as far as I know, did not use bejewelled hair-bands, this could be a feminine ornament, perhaps originally belonging to Sarantenos's deceased wife.

It has become obvious, I hope, that the evidence on jewellery provided by Byzantine legal documents of the 11th to the 15th centuries is circumscribed not only by the biases of the surviving sample, which do not allow meaningful observations to be made concerning chronological and geographical patterns in the use of specific types, but also by the nature of the documents themselves and the legal and cultural conventions to which both they and their authors subscribed. These limitations, compounded in some cases by our difficulties in deciphering the meaning of Byzantine technical terms, should not, however, deter researchers from having access to this source material. We have seen how the evidence provided by these documents on types, materials, techniques, iconography and provenance can confirm, complement and enrich what we already know from the archaeological and the pictorial records, while in some cases raising interesting questions that can stimulate future archaeological research.

However, it is in tracing the economic and social life of

jewellery in Byzantium that our documents can prove particularly helpful, by revealing something about its circulation and the variety of contexts in which it played a part. In our documents, pieces of jewellery change hands, often more than once, passing indiscriminately between owners of either sex, lay or ecclesiastic. They are being bought, sold, loaned, given as surety, pawned or used in payments instead of money; they are bequeathed or inherited, offered as personal and diplomatic gifts, donated to religious institutions either to be sold or kept in the sacristy, exchanged as engagement tokens between future spouses, given as dowry goods or as part of the marital gift from husband to wife. As previously pointed out by Oikonomides,⁹⁷ what is primarily highlighted in our texts is jewellery's function as an asset. Notwithstanding, by taking a closer look, especially at wills, we may be able to detect something of the motivation behind specific endowments of jewellery, be it conformity to established patterns of social behaviour, personal preferences and inclinations, piety, or, perhaps, a special bond between donor and beneficiary that the gift was meant to honour and commemorate. And last but not least, there are those rare instances where the documents offer us a glimpse of how some Byzantine owners esteemed specific items in their possession, because of their aesthetic qualities, the sentimental value they had accrued, and above all as depositories of cultural and religious values and symbols of social status and affluence.

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Elegance Over the Borders: The Evidence of Middle Byzantine Earrings

Jenny Albani

In the passage concerning jewellers, the *Book of the Eparch*, published by Leo VI the Wise (886–912), states that if a jeweller discovers a woman offering for sale objects of gold or silver, or precious stones, he should inform the Eparch of these things so that he could prevent their being exported to foreign peoples.¹ The content of this passage betrays the Byzantine state's intention to control the circulation of jewellery outside its borders. How realistic was this aim? Was the medieval taste for objects of personal adornment strictly 'national' or can we speak of an 'international' fashion for jewellery? As modern research has pointed out, persons, goods and ideas circulated quite widely in the Middle Byzantine period (9th–13th centuries),² I shall attempt to support this point of view on the basis of the archaeological evidence provided by medieval earrings, concentrating mainly on the relationships between the forms and types of jewellery prevalent in Byzantine, Islamic and Slavic regions.

Two well-known examples of Middle Byzantine painting may speak in favour of our point. On the late 12th-century fresco of the Church of Hagioi Anargyroi at Kastoria, Anna Radine, the wife of the donor Theodoros Lemniotes, wears a pair of gold earrings with a crescent-shaped body (Pl. 1). Gold earrings of the same type, which are very similar to a pair of earrings that probably originated in Kievan Rus',³ also adorn the elegant figure of Desislava (Pl. 2), the wife of Sebastokrator Kalojan, who in 1259 commissioned the wall-paintings of the Church of SS Nicholas and Panteleimon at Bojana, near Sofia, in the Bulgarian kingdom.

It is no exaggeration to say that crescent-shaped earrings, which appeared in the mid-2nd millennium BC, and passed from Rome to Byzantium⁴ and from Byzantium to Islamic⁵ and Slavic⁶ countries, are the most popular type in the Middle Byzantine period, as there are a large number of surviving specimens. They are made not only of gold and silver, aimed at the aristocracy, but also of other materials such as copper and tin-plated bronze which could be purchased by people of a lower social status.

A single gold earring in the Kanellopoulos Museum in Athens (Pl. 3),⁷ and a pair in the Dumbarton Oaks Collection, Washington DC,⁸ are characteristic examples of the crescent-shaped type. In the centre of the body is an openwork medallion with a *repoussé* bust of the Virgin *orans* surmounted by a cross with the engraved inscription $\Phi\omega\varsigma$, *ZWH* ('Light, Life'). As these earrings in Athens and Washington have the same dimensions and decoration they have been attributed to the same Constantinopolitan workshop and dated to the 10th–11th century. Inscribed earrings with the same body shape (the crescent or 'hilar' in Arabic) also seem to have met the taste of the Islamic public, as testified by a pair of 12th-century earrings found in Majorca⁹ and a pair in the Benaki Museum in Athens (Pl. 4),¹⁰ both of which are attributed to a workshop in Islamic Spain. The central motif over the upper edge of the semicircular body is symbolic of redemption, as it depicts two confronted falcons nourished by the Tree of Life, a very popular motif in both Byzantine and Islamic iconography. The content of the Arabic calligraphic inscription,¹¹ executed in filigree on



Plate 1 Anna Radine, detail. Wall-painting in the Church of Hagioi Anargyroi at Kastoria, late 12th century



Plate 2 Desislava, detail. Wall-painting in the Church of SS Nicholas and Panteleimon at Bojana, dated 1259



Plate 3 Gold earring, 10th–11th century. Kanellopoulos Museum, Athens



Plate 4 Pair of gold earrings, late 12th century. Benaki Museum, Athens



Plate 5 Pair of gold earrings with enamel decoration, first half of 10th century. London, British Museum (PE AF 338)



Plate 6 Gold earring from the Preslav Treasure, first half of the 10th century. Natsionalen Istoriko-Arkheologicheski Reservat s Muzei 'Veliki Preslav', Preslav



Plate 7a-b Gold earrings probably from Crete, 10th century. National Archaeological Museum, Stathatos Collection, Athens





Plate 8 Pair of silver earrings, 9th–10th century. Byzantine and Christian Museum, Athens

the crescent-shaped body, is also religious; it has, however, a more pronounced decorative role than that on the above-mentioned Byzantine earrings.

On the other hand an iconographic repertoire inspired by nature can be observed on a number of crescent-shaped earrings which have been dated to the 9th to 10th centuries. They all consist of a lunate plaque framed by hollow gold spheres and lavishly decorated with enamels depicting animals, birds and plants, granulation and precious stones, while around their outer edges gems, fastened to rods or inside rings, alternate with triangular projections composed of granules. To this group belong two single earrings, one of which is a tomb find from Naupactos,¹² western Greece, while the other, probably from the municipality of Rethymnon, belongs to the collection of the Historical Museum in Herakleion, Crete.¹³ Further specimens are two pairs of earrings in the Kanellopoulos Museum, Athens,¹⁴ and in the British Museum, London (Pl. 5),¹⁵ as well as two single earrings from the Preslav Treasure (Pl. 6).¹⁶ The latter are datable to the first half of the 10th century, which indicates that this type was also in fashion in the capital of the first Bulgarian kingdom (681–1018). Further outstanding examples of this group are a pair of earrings (Pl. 7) and three single earrings in the National Archaeological Museum, Athens,¹⁷ found in Crete together with coins of Michael II (820–29) and Constantine VII Porphyrogennetos (913–59). Two pairs of these earrings bear Kufic inscriptions on the reverse, asking for God's blessing on their owners, Aisa and Zaynab. Pointing to the hybrid character of their decoration, closely related to both Byzantine and Fatimid traditions, Coche de la Ferté suggested that these earrings were manufactured in 10th-century Crete for Islamic residents, probably before the Byzantine re-conquest of 961.¹⁸

Surviving silver earrings with a flat crescent-shaped body are decorated in the same techniques as their gold counterparts (filigree and granulation) but not enamel, thus creating less colourful effects. Instead, they have attachments of various shapes axially fixed to their lunate body. Typical examples are the excavated finds from two cemeteries, at Azoros in the



Plate 9 Pair of silver earrings from Veliko Gradište, mid-10th–early 11th century. National Museum of Požarevac

Elasson district¹⁹ and in Hagia Trias near Melea,²⁰ in Thessaly. Another well-known example is a 9th- to 10th-century pair in the collection of the Byzantine and Christian Museum, Athens (Pl. 8).²¹ The lunate body is formed of three braided wires ending in spherical 'beads'. A cast cross with flaring arms is attached to the upper edge of the body, while a convex disc surrounded by five granulated triangular protrusions projects from the bottom. The same circular motif is encountered on a bronze crescent-shaped earring, an 11th-century excavated find from Corinth, the upper part and the right half of which are now missing.²² A triple braid also forms the lunate body of an elaborate pair of mid-10th- to early 11th-century silver earrings found at Veliko Gradište, Serbia, belonging to the National Museum of Požarevac (Pl. 9).²³ From the body, which ends in two biconical beads, is suspended an elongated attachment composed of conical elements of openwork filigree and granules. Because of the high artistic level of their execution and their exceptional shape, which is unique in Slavic countries to date, these earrings are thought to have been imported into medieval Serbia by a Byzantine merchant for an aristocratic client with a penchant for Byzantine forms.²⁴

Bronze earrings of the crescent-shaped type have the same characteristics as those made of silver, but are less elaborately decorated. A bronze earring of this type was been found in the excavations at Corinth, Greece (Pl. 10), and can be dated to the 10th century or later. Its lunate body, studded with small knobs, has a scalloped upper edge and an elongated granulated projection at the bottom, which terminates in a biconical bead.²⁵ A group of 11 single earrings, dated to the 9th to 10th centuries and found together in the excavation of the 6th-century fortress of Boljetin on the south bank of the Danube in Serbia,²⁶ are similar to the Corinth earring (Pl. 11). The upper edges of their crescent-shaped bodies are scalloped and pendants are attached at the bottom. Five of these pieces are made of tin-plated copper and are decorated in filigree, while their pendants are pear-shaped. The other six, made of tin-plated bronze, are cast; their decoration imitates the filigree technique and their attachment is in the form of a



Plate 10 Bronze earring from Corinth, 10th century. Archaeological Museum, Corinth



Plate 11 Earrings from the fortress of Boljetin, 9th–10th century



Plate 12 Pair of bronze earrings from Stylos, 10th–12th century. Byzantine and Post-Byzantine Collection, Chania

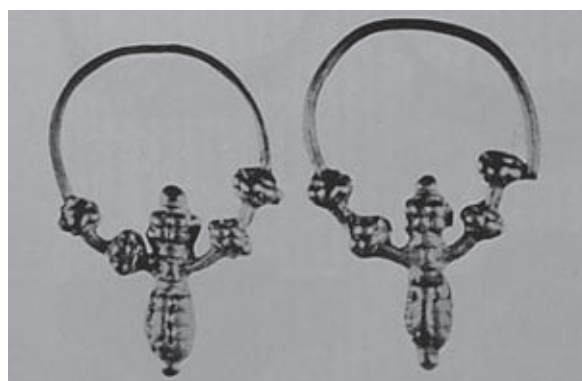


Plate 13 Pair of earrings from Veliko Gradište, mid-10th–early 11th century



Plate 14 Pair of bronze earrings, 10th–12th century. Byzantine and Post-Byzantine Collection, Chania



Plate 15 Earrings from Doničko Brdo, near Kragujevac, 10th–13th century

three-pointed star. These 11 earrings have been attributed to a local workshop which would have been aware of Byzantine models.²⁷ As they are all single specimens, they have been interpreted as samples used by a Slavic artisan-merchant.²⁸

Crescent-shaped earrings with elongated pendants attached to their bodies are closely related to earrings where the lower part consists of a thick wire flanked by two beads and axially decorated with an attachment. This type is considered to have been a northern import to Byzantium in the 5th and 6th centuries during the period of the 'Völkerwanderung',²⁹ but is also widespread in the Middle Byzantine period, from Macedonia to Crete, with specimens closely related to earrings

of Slavic origin. A typical and very well preserved example is a pair of bronze silver-plated earrings from a cemetery at Azoros, Elasson in Thessaly.³⁰ The axially fixed attachment is in the form of a granulated cylinder, which is flanked by two spherical beads with knobs. Three similar specimens, with biconical beads, were found in the excavations at Corinth and can be dated to the 10th to 11th century.³¹ This type is further represented by a pair of earrings from a Middle Byzantine tomb in the Church of St John Theologos at Stylos, Apokoronas, in the municipality of Chania, Crete (Pl. 12).³² In form and technique these specimens resemble three pairs of silver earrings found at Veliko Gradište, dated to the mid-10th



Plate 16 Pair of silver earrings from Azoros near Elasson, 9th–13th century. 7th Ephorate of Byzantine Antiquities, Thessaly



Plate 17 Bronze earring from Stylos, 10th–12th century. Byzantine and Post-Byzantine Collection, Chania

to early 11th century, and thought to have been imported by a Byzantine merchant (Pl. 13).³³ Further parallels are two pairs of bronze earrings found during the excavation of a cemetery in the fortress of Belgrade and dated to the 10th or 11th century.³⁴ A variation of the above-mentioned type, in which the central attachment consists of only one or two biconical beads, have earlier precedents in the art of the 'Völkerwanderung'.³⁵ Typical 10th- to 12th-century examples are a pair of silver earrings from a cemetery in Ierissos near Ouranopolis, Chalkidiki,³⁶ a bronze earring found on a small island in Karla Lake near Pelion, Thessaly,³⁷ a pair, also in bronze, from the excavations at Apokoronas, Crete (Pl. 14),³⁸ a silver pair from the cemetery in Matičane, Kosovo³⁹ as well as five silver artefacts from an Early Medieval hoard found at the hill fort of Zawada Lanckorońska in southern Poland.⁴⁰

Crescent-shaped earrings are also found in a heavier version, the so-called boat-shaped type. These ornaments, made either of gold or silver or even bronze, were constructed from two convex sheets in the shape of a full crescent, which were soldered together. The faces are plain or decorated with filigree, granulation, enamel and stone inlays. Since examples of this type are found not only in Constantinople⁴¹ and the Byzantine periphery⁴² but also in Fatimid Egypt and Greater Syria,⁴³ these ornaments must have enjoyed great popularity in both Byzantine and Islamic regions.

The hollow, box-like, lavishly decorated crescent-shaped earrings, a good number of which have survived in museum collections,⁴⁴ have so far been considered typical of the Fatimid goldsmith's art. Like the boat-shaped type, these are also composed of two sheets, though these are not attached to each other but are joined by means of a rectangular strip at the bottom, thus forming a crescent-shaped 'box'. It seems, however, that even lunate earrings of box-like construction were not unknown in Byzantium, as attested by two specimens that have come to light in excavations at Sparta,⁴⁵ in the Peloponnese, and at Valta, in Macedonia.⁴⁶ It is noteworthy, moreover, that this box-like construction is further encountered on a pair of 11th- to 12th-century lunate earrings from Constantinople,⁴⁷ on a pair of 11th- to 12th-century gold and *cloisonné* enamel earrings which probably originated in Kievan Rus',⁴⁸ and on a pair of 11th-century silver-gilt earrings

with enamels attributed to Kievan Rus' or Byzantium.⁴⁹

Leaving aside the crescent-shaped type, it is interesting for our topic to examine a type of earring prevalent in Slavic countries from the 10th to the 13th centuries which is thought to have been based on Byzantine models. It consists of a plain hoop in which an attachment in the form of a stylised bunch of grapes is fixed axially and occasionally flanked by two, four or six beads with or without knobs. This earring type is embellished with filigree or granulation. It may, moreover, be cast in imitation of both these techniques. Characteristic specimens, either in silver or in bronze, are excavated finds from the medieval Serbian cemeteries of Doničko Brdo in Kragujevac (Pl. 15),⁵⁰ Lešje,⁵¹ Brza Palanka,⁵² Veliki Gradac⁵³ and Niš.⁵⁴ Earrings of this type are further encountered in Kievan Rus', Hungary and Poland and have been interpreted as Byzantine imports. It cannot, however, be ruled out that a number of these earrings may have been manufactured by local workshops following Byzantine models.⁵⁵ The pair found during the excavation of the Middle Byzantine cemetery at Azoros, Elasson, in Thessaly could have been a Byzantine prototype (Pl. 16). Each of these earrings, made of silver, consists of a plain hoop, to which two elongated granulated pendants and four spherical beads with small knobs are fixed.⁵⁶

A more simplified variation of the above-mentioned earrings consists of a wire hoop on which are strung one or more, generally three, beads of various shapes: spherical, cubic, conical etc., plain or decorated. This type of ornament is also supposed to have originated in the North, as specimens have been found in Kievan Rus', Germany and Serbia. Typical examples found in Byzantine territory are the pairs of bronze earrings from the excavation of the cemetery at Aerino, in the municipality of Magnesia, Thessaly,⁵⁷ and from the excavation at Apokoronas, in the municipality of Chania, Crete (Pl. 17),⁵⁸ both decorated with three plain spherical beads. In a good number of specimens, the beads are kept in place by a wire wound around the ring, as for example on the pair of earrings from the cemetery at Aerino⁵⁹ and that of the Taxiarchis at Ermitsa, Agrinio, in western Greece.⁶⁰ A pair of silver earrings from St Panteleimon, in Niš, Serbia (Pl. 18),⁶¹ as well as a pair found in poor condition in the cemetery of Doničko Brdo, Serbia, decorated with three ellipsoid beads, are similar in

form.⁶² Earrings with a single bead of various shapes and techniques are also very widespread, as is documented by medieval excavation finds in Lukovit-Mušat, Bulgaria,⁶³ in Prahovo,⁶⁴ Korbovo,⁶⁵ Braničevo,⁶⁶ Ribnica,⁶⁷ in Kurjače near Požarevac,⁶⁸ Serbia, in Corinth,⁶⁹ Greece, as well as by a wall-painting in the Church of St Nicholas at Polemitas in the Mani, Peloponnese, depicting St Kyriaki.⁷⁰ This fresco, which can be dated on the basis of stylistic criteria to the 14th century,⁷¹ also reveals the long-lasting appeal of this type to the Byzantines.

If we now turn to the Iranian goldsmith's art of the 9th to 13th centuries we find both simple and elaborate specimens of

the above-mentioned type, which provides evidence of its popularity in medieval Islamic society. Well-known amongst these are two exquisite unmatched 12th- to 13th-century gold earrings in the L.A. Mayer Memorial Institute for Islamic Art in Jerusalem (Pl. 19),⁷² as well as a simple 9th-to 10th-century earring of gold and sard found in the Nishapur excavations by the Metropolitan Museum of Art, New York, and now part of its collection.⁷³

Two more types of earrings may be mentioned which are rarer but have parallels in both Byzantium and Slavic countries. The first is the so-called 'granulated' type



Plate 18 Earring from St Panteleimon, Niš



Plate 19 Gold earring from Iran, 12th–13th century. L.A. Mayer Memorial Institute for Islamic Art, Jerusalem



Plate 20 Gold earrings from Thessaloniki, 10th–14th century. Museum of Byzantine Culture, Thessaloniki



Plate 21 Earring from Visiko Ravan



Plate 22a–b Earrings from Corinth, 11th–12th century. Archaeological Museum, Corinth



Plate 23 Earring from Lukovit Mušat

represented in the Byzantine Empire by a pair of gold earrings from an excavation in Thessaloniki which can be dated to between the 10th and the 14th centuries (Pl. 20).⁷⁴ They are constructed of a circular hoop which is embellished with a triple row of granules flanked by two spherical beads. Slavic examples (Pl. 21) are local interpretations of Byzantine prototypes which penetrated the Dalmatian coast and were disseminated through the Croatian valley of the Sava, *via* Bosnia and Herzegovina to Serbia. They were manufactured by local workshops for a local clientele, as is attested by excavated finds in numerous localities in the above-mentioned regions, and enjoyed great popularity, mainly in the 12th century.⁷⁵ The second type, known as ‘early German-Slavic’,⁷⁶ is more modest but equally widespread over a very large area from Novgorod to Corinth, where it is found in 11th- and 12th-century contexts.⁷⁷ A special feature of this type, which is found in numerous variations, is a fine wire wound around the lower part of the ring in an intricate fashion. A close parallel for an earring of this so-called ‘spiral’ type, found in the excavations at Byzantine Corinth (Pl. 22),⁷⁸ is provided by an excavated find from Korbovo in Serbia,⁷⁹ while another variation of the type is represented by finds from the excavations at Corinth,⁸⁰ Thebes,⁸¹ Azoros in Elasson,⁸² Greece, and Lukovit-Mušat, Bulgaria (Pl. 23).⁸³



Plate 24 Gold basket-shaped earring, First quarter of the 11th century, Benaki Museum, Athens

I will conclude with the most elaborate and best-known type of earring, namely the ‘basket-shaped’, which suited the taste of the upper classes in the eastern Mediterranean from the 3rd century onwards. More than 50 Middle Byzantine gold pieces are preserved in museum collections in the United States, Germany, England, Greece (Pl. 24), Turkey, Egypt, Syria, Israel, Iran and Iraq.⁸⁴ They consist of a hollow polyhedral body, to the faces of which three or five hemispheres are attached. A suspension hoop is fastened to its upper part. The elaborate adornment of these jewels – openwork, filigree and granulation – is often enriched with gems and enamel. Because of the close affinities of their decoration with Islamic goldwork, many scholars ascribe them to Islamic workshops.⁸⁵ However, a mid-10th to early 11th-century bronze example found in Constantinople,⁸⁶ a single silver earring found in Sparta in the Peloponnese,⁸⁷ and a pair of silver earrings found in the excavation at Parapotamos, Thesprotia, western Greece (Pl. 25)⁸⁸ may indicate that basket-shaped earrings were manufactured in both the Byzantine and the Islamic worlds.

This brief survey of medieval earrings has focused on the interconnections of types, materials and techniques between Byzantine, Islamic and Slavic jewellery. The crescent-shaped type may be characterised as a ‘universal’ one, since variations of it have been noted in all three cultures. The flat variation seems to be preferred by Byzantines and Slavs while the box-like construction is associated mainly with Islamic and Slavic countries.

Elaborate gold earrings, such as the crescent-shaped and the basket-shaped types, common in the Byzantine and Islamic worlds, point towards a shared taste for high-status objects. Although the Byzantines and Arabs were rivals and enemies *par excellence*, the emperors and the court of Byzantium acquired a taste for Islamic objects in the Middle Byzantine era, up to the mid-13th century, whilst Arabs admired Byzantine art, architecture, textiles and luxury goods.⁸⁹ Jewellery exchanges between Byzantines and Arabs were possible mainly through diplomatic gifts⁹⁰ and trade,⁹¹ but also through the mobility of prisoners-of-war with special technical skills.⁹²



Plate 25 Pair of silver earrings from Parapotamos in Thesprotia, late 10th - early 11th century

On the other hand, the numerous types, materials and techniques common to both Byzantium and the Slavic countries, studied together with Byzantine-Slavic political, religious and economical relations, may betray a more global cultural interchange, with the influence of Byzantine models on Slavic jewellery being particularly strong. Diplomatic gifts between members of the Byzantine and Slavic social élite form only one aspect of this approach; others may be related to the mobility of ordinary people, merchants, artisans and workshops on both sides.⁹³

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Notes

- Liber Praefecti*, 2.4. 'Εἴ τις τῶν ἀργυροπραττῶν ἐφεύροι πρᾶτριαν εἶδη χρυσᾶ ἢ ἀργυρᾶ προβάλλουσιν, εἴτε μαργαρίτας ἢ λίθους τιμίους, ὀφείλει τῷ ἐπάρχῳ ἐμφανίζειν ταῦτα, ἵνα μὴ τοῖς ἔθνεσι παραπέμπωνται': J. Koder (ed.), *Das Eparchenbuch Leons des Weisen* (Corpus Fontium Historiae Byzantinae XXXIII), Vienna, 1991, 86. For an English translation of the passage, see B.H. Rosenwein (ed.), *Reading the Middle Ages. Sources from Europe, Byzantium and the Islamic World*, Peterborough, 2006, 137.
- F. Gabrieli, 'Greeks and Arabs in the Central Mediterranean Area', *DOP* 18 (1964), 60–1, 63; M. Canard, 'Les relations politiques et sociales entre Byzance et les Arabes', *DOP* 18 (1964), 52–3; G.C. Miles, 'Byzantium and the Arabs: Relations in Crete and the Aegean Area', *DOP* 18 (1964), 20; I. Nikolajević, 'Depotfund bronzener Kunstgegenstände aus Rakovac – ein Beispiel des Exports byzantinischer Kunst', in H.L. Nickel (ed.), *Byzantinischer Kunstexport: seine gesellschaftliche und künstlerische Bedeutung für die Länder Mittel- und Osteuropas*, Halle – Wittenberg, 1978, 229; A. Bank, 'Byzantinsche Kunstexport in Rußland und Transkaukasien', in Nickel, *ibid.*, 28; M. Gerolymatou, 'Εμπόριο, κοινωνία και αισθησεις (11ος-12ος αι.)', in Chr. Angelidi (ed.), *Το Βυζάντιο ώριμο για αλλαγές. Επιλογές, ευαισθησίες και τρόποι έκφρασης από τον ενδέκατο στον δέκατο πέμπτο αιώνα* [Εθνικό Ίδρυμα Ερευνών. Ινστιτούτο Βυζαντινών Ερευνών. Διεθνή Συμπόσια, 13], Athens, 2004, 367–8; eadem, *Αγορές, έμποροι και εμπόριο στο Βυζάντιο (9ος-12ος αι.)* [Εθνικό Ίδρυμα Ερευνών. Ινστιτούτο Βυζαντινών Ερευνών. Μονογραφίες, 9], Athens, 2008, *passim*.
- The Metropolitan Museum of Art, New York (Inv. no. 1979.278. 1a,b): H.C. Evans and W.D. Wixom (eds), *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era, AD 843–1261*, (Metropolitan Museum of Art, New York), New York, 1997, 308, no. 210, fig. 210.
- J.D. Dodds (ed.), *Al-Andalus. The Art of Islamic Spain*, New York, 1992, 300, no. 70. Evans and Wixom (n. 3), 247, no. 171; A. Lester, 'A Fatimid Hoard from Tiberias', in N. Brosh (ed.), *Jewellery and Goldsmithing in the Islamic World. International Symposium, The Israel Museum, Jerusalem 1987*, Jerusalem, 1991, 26.
- R. Hasson, *Early Islamic Jewellery Art*, Jerusalem, 1987, 10.
- M. Corović-Ljubinković, 'Les influences de l'orfèvrerie byzantine sur la parure de luxe slave du IXe au XIIe siècles', *Actes du XIIe Congrès International d'Etudes Byzantines (Ochrid 10–16 sept. 1961)*, vol. III, Belgrade, 1964, 35–9.
- Inv. no. Π.197: M. Borboudakis (ed.), *Οι Πύλες του Μυστηρίου. Θησαυροί της Ορθοδοξίας από την Ελλάδα*, Athens, 1994, 303, no. 148, fig. 148; E. Kypraiou (ed.), *Greek Jewellery. 6000 Years of Tradition*, Athens, 1997, 229, no. 281; and N. Chatzidakis and C. Skampavias (eds), *The Paul and Alexandra Kanellopoulos Museum, Byzantine and Post-Byzantine Art*, Athens, 2007, 66, no. 58.
- D.O.C. Inv. no. 51.27: M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection. Volume Two. Jewelry, Enamels and Art of the Migration Period*, Washington DC, 1965, 92–3, no. 133, pl. LXV. The Dumbarton Oaks earrings and a similar example in the Kanellopoulos Museum (Pl. 3) have been considered to be forgeries: S.A. Boyd and G. Vikan, *Questions of Authenticity among the Arts of Byzantium*, (Dumbarton Oaks, Byzantine Collection, Publications, No. 3), Washington DC, 1981, 20–21, no. 9; A. Bosselmann-Ruickbie, 'Byzantinisch, Islamisch oder 'Internationaler Stil'? Email- und Körbchen-ohrringe aus dem östlichen Mittelmeerraum', in U. Koenen and M. Müller-Wiener (eds), *Grenzgänge im östlichen Mittelmeerraum. Byzanz und die islamische Welt vom 9. bis 13. Jahrhundert*, Wiesbaden, 2008, n. 6. In my opinion, the arguments against the authenticity of these jewels are not strong enough: the words 'Light' and 'Life', engraved on the cross, are not related to the Virgin but, as usual in Byzantine iconography, to the cross (see, for example, the incised crosses with the inscriptions ΦΩC ΖΩΗ which decorate the centre of two patens (one in Pliska and one in Washington DC) and which have been dated to the 9th–11th centuries: M. Mundell Mango, 'The Significance of Byzantine Tinned Copper Objects', *Θυμιάματα στη μνήμη της Δασκαρίνας Μπούρα*, Athens, 1994, 222). Furthermore, the antique form of sigma (Σ), which appears on these earrings, could reflect the predilection of a Constantinopolitan workshop for antique models as C. Skampavias, Curator at the Kanellopoulos Museum, suggested in a recent entry on the Athens earring: Chatzidakis and Skampavias (n. 7), 66, no.58. C. Mango has also regarded the Σ-shaped sigma in an inscription of the citadel of Ankara, related to the Emperor Michael III and dated by H. Grégoire to 856–66, as a sign of deliberate antiquarianism. In 1192 the antique form of sigma reappears in a painted inscription in the Church of Panagia Arakiotissa at Lagoudera, Cyprus, whose frescoes have been attributed to a Constantinopolitan master: C. Mango, 'Byzantine epigraphy (4th to 10th centuries)', in D. Harlfinger and G. Prato (eds), *Paleografia e codicologia greca. Atti del II Colloquio internazionale (Berlino-Wolfenbüttel, 17–21 ottobre 1983)*, I, Alexandria, 1991, 243–4, fig. 21; H. Grégoire, 'Inscriptions historiques byzantines, Ancyre et les Arabes sous Michel l'Évrogne', *Byzantion* IV (1927/28), 437ff.; A. Nicolaïdēs, 'L'église de la Panagia Arakiotissa à Lagoudéra, Chypre: Etude iconographique des fresques de 1192', *DOP* 50 (1996), fig. 33.
- It belongs to the collection of the Museo de Mallorca, Palma de Mallorca (Inv. nos 23812/23813): Dodds (n. 4), 300, no. 70.
- Inv. no. 1862: Evans and Wixom (n. 3), 421–2, no. 279, fig. 279.
- On the Athens pair it reads: 'For the name of God, the merciful and the compassionate. May God bless the Prophet Muhammed': Evans and Wixom (n. 3), 421. On the Majorca pair it reads: 'In the name of God, the merciful, the compassionate': Dodds (n. 4), 300, no. 70.
- M. Petrikaki, 'Στ' Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων', *Αρχαιολογικόν Δελτίον* 42 (1987), *ΒΙ. Χρονικά*, 175, pl. 86a.
- Inv. no. 327: *Byzantine Art, An European Art, Ninth Exhibition held under the auspices of the Council of Europe*, Athens, 1964, 382–3, no. 440.
- Inv. no. 449a-b: M. Brouskari, *The Paul and Alexandra Kanellopoulos Museum. A Guide*, Athens, 1985, fig. on 144.
- Inv. no. PE AF 338: D. Buckton (ed.), *Byzantium. Treasures of Byzantine Art and Culture from British Collections*, London, 1994, 133, no. 142, fig. 142; Evans and Wixom (n. 3), 244, no. 166, fig. 166.
- Natsionalen Istoriko-arkheologicheski Reservat s Muzei 'Veliki Preslav' in Preslav (Inv. nos 3381[I] and A3381[8], B3381[9]): Evans and Wixom (n. 3), 334–5, no. 228, figs 228A and B.
- É. Coche de la Ferté, *Collection Hélène Stathatos: Les Objets byzantins et post-byzantins*, vol. II, Limoges, 1957, 18–26, pl. II/nos 4–5; G. Ch. Chourmouziadis, *The Gold of the World*, Athens, 2003, fig. 191.
- Coche de la Ferté (n. 17), 24–6; *Byzantine Art* (n. 13), 381–2, no. 437. Evans and Wixom (n. 3), 421, no. 279, fig. 279; Miles (n. 2), 17, fig. 11.
- They belong to the collection of the 7th Ephorate of Byzantine Antiquities (Inv. no. M 268-269): D. Papanikola-Bakirtzi (ed.), *Everyday Life in Byzantium. Byzantine Hours. Works and Days in Byzantium*, Athens, 2002, 435, no. 564, fig. 564; L. Deriziotis and S. Kouyoumtzoglou, 'Ανακαλύπτοντας την αγνόστον χριστιανικήν Περραιβικήν Τρίπολιν', in I. Kakouris et al. (eds), *Θωράκιον. Αφιέρωμα στη Μνήμη του Παύλου Λαζαρίδη*, Athens, 2004, 68, pl. 25b.

- 20 Deriziotis and Kouyoumtzoglou (n. 19), 72, pl. 27.
- 21 Inv. no. B.M. 3184: Kypraiou (n. 7), 208, no. 240.
- 22 G.R. Davidson, *Corinth. Volume XII: The Minor Objects*, Princeton NJ, 1952, no. 2035, pl. 108.
- 23 D. Minić and M. Tomić, 'Ostava srednjovekovnog nakita iz Velikog Gradišta', *Starinar* XXIII (1972), pl. I/4.
- 24 *Ibid.*, 130.
- 25 Davidson (n. 22), 253, no. 2034, pl. 107.
- 26 S. Ercegović-Pavlović, 'Ostava naušnica sa rimsko-vizantijskog kastela iz Boljetina na Dunavu', *Starinar* XX (1969), 84–93, figs 1–11a. For the date of these earrings, see *eadem*, 'Prilog proučavanju naušnice u Srbiji od 9. do 13. stoljeća', *Starinar* XXI (1970), 50.
- 27 Other examples of tin-plated copper and tin-plated bronze are widespread in the Middle Byzantine period. This technique was also used on liturgical objects and utensils of this period to imitate silver: P. Sevrugian, *Liturgisches Gerät aus Byzanz. Die Berliner Patene und ihr Umkreis*, Berlin, 1992, *passim*; Mundell Mango (n. 8), 221ff, esp. 226.
- 28 Ercegović-Pavlović 1969 (n. 26), 95.
- 29 Davidson (n. 22), 250.
- 30 In the collection of the 7th Ephorate of Byzantine Antiquities, Inv. no. M 297-298: Papanikola-Bakirtzi (n. 19), 436, no. 566, fig. 566.
- 31 Davidson (n. 22), 253, nos 2031–33, pl. 108.
- 32 It belongs to the Byzantine and Post-Byzantine Collection in Chania (Inv. no. M 26): J. Albani, 'In der Hoffnung auf ewiges Leben. Grabbeigaben aus der byzantinischen und nachbyzantinischen Sammlung in Chania, Kreta', in W. Hörandner et al. (eds), *Wiener Byzantinistik und Neogräzistik. Beiträge zum Symposium Vierzig Jahre Institut für Byzantinistik und Neogräzistik der Universität Wien im Gedenken an Herbert Hunger* (Byzantina et Neograeca Vindobonensia, Bd. XXIV), Vienna, 2004, fig. 7.
- 33 Now in the National Museum of Požarevac: Minić and Tomić (n. 23), 129–30, pl. I/1, 2, 3. For examples from Croatia, see Corović-Ljubinković (n. 6), fig. 2.
- 34 G. Marianović-Vujović, 'Srednjovekovne nekropole u Srbiji evidentirane kroz arheološka iskopavanja', *Starinar* XXXVII (1986), 208, figs 1–2.
- 35 Davidson (n. 22), 250, 253, no. 2030.
- 36 Presently in the Christian Museum of Ouranopolis (Inv. no. 33A, 33B): I. Touratsoglou, *Makedonien. Geschichte – Monumente – Museen*, Athens, 1995, fig. 378.
- 37 K. Grundmann, 'Magula Hatzimissiotiki. Eine steinzeitliche Siedlung im Karla-See', *Mitteilungen des Deutschen Archäologischen Instituts. Athenische Abteilung* 62 (1937), 67–8, pl. 36.
- 38 It belongs to the Byzantine and Post-Byzantine Collection in Chania (Inv. no. M.K. 11): Albani (n. 32), fig. 14.
- 39 Marianović-Vujović (n. 34), fig. 24.
- 40 They belong to the collection of the Archaeological Museum of PAU in Cracow: H. Zoll-Adamikowa, M. Dekówna and E.M. Nosek, *The Early Medieval Hoard from Zawada Lanckorońska (Upper Vistula River)*, Warsaw, 1999, fig. 44, nos 59–63.
- 41 E.g. an earring from the Dumbarton Oaks Collection (Inv. no. 53.12.26) which is said to have been found in Constantinople: Ross (n. 8), 94, no. 135, pl. LXV; Evans and Wixom (n. 3), 247, no. 171, fig. 171.
- 42 E.g. the excavation finds from Corinth: Davidson (n. 22), 254, nos 2045–7, fig. 57, pl. 108.
- 43 E.g. a pair of earrings from a hoard in an unglazed earthenware vessel found in Tiberias, which has been dated by means of coins to between 1021 and 1040, now in the Israel Museum (Inv. no. IAA 74-2138) in Jerusalem: Lester (n. 4), 26–7; Evans and Wixom (n. 3), 418–9, fig. 275A, no. 275. Moreover, an unmatched pair of earrings (Inv. nos J68 and J69) from Egypt or Syria, now in the L.A. Mayer Memorial Institute for Islamic Art, Jerusalem, has been dated to the 10th–11th centuries: Hasson (n. 5), 76, no. 95, figs 95a–95b.
- 44 E.g. the specimens in the Benaki Museum for Islamic Art, Athens (Inv. no. 1864), in the L.A. Mayer Memorial Institute for Islamic Art, Jerusalem (Inv. nos J234, J76; Harari Collection), and in the Museum für Islamische Kunst, Berlin (Inv. nos I.1986.58, I.1986.59, I.1994.39 and I.2334): A. Ballian (ed.), *Benaki Museum, A guide to the Museum of Islamic art*, Athens, 2006, fig. 39; Hasson (n. 5), 78–9, nos 100, 102, pls 100, 102; A. von Gladiss, *Schmuck im Museum für Islamische Kunst*, Berlin, 1998, 90, 93–4, nos 16, 22–3, pl. 8.
- 45 Now in the Mystras Museum (Inv. no. 1415): *Byzantine Art* (n. 13), 381, no. 434.
- 46 L. Toska and G. Chatzakis, 'Βυζαντινό νεκροταφείο στη Βάλτα (Κασσάνδρεια)', *Το Αρχαιολογικό Έργο στη Μακεδονία και Θράκη* 15 (2001), 162, 166, fig. 11.
- 47 Formerly in the collection of J.B. Balaschow, St Petersburg: N.P. Kondakov, *Histoire et monuments des émaux byzantins*, Frankfurt, 1892, 323–6, figs 101–02.
- 48 In the Metropolitan Museum of Art, New York (Inv. no. 1979. 278. 1a,b): Evans and Wixom (n. 3), 308, no. 210, fig. 210.
- 49 Now in the Metropolitan Museum of Art, New York (Inv. no. 17.190.2051,2052): Evans and Wixom (n. 3), 308–9, no. 211, fig. 211.
- 50 D.M. Petrović, 'Srednjovekovna nekropola na Doničkon Brdu (Gradac kod Kragujevca)', *Starinar* XIII–XIV (1962–63), figs 28/2,3,4; Marianović-Vujović (n. 34), fig. 6.
- 51 Marianović-Vujović (n. 34), fig. 12.
- 52 *Ibid.*, fig. 14; S. Ercegović-Pavlović, 'Prilog proučavanju srednjovekovnih nekropola u istočnoj Srbiji', *Starinar* XVII (1966), pl. IV/1.
- 53 D. Minić, 'Srednjovekovna nekropola na Velikom Gradcu kod Donjer Milanovca', *Starinar* XX (1969), fig. 8; *eadem*, 'Spiralno uvijena žuca na srednjovekovnom nakitu iz Srbije', *Starinar* XXXVIII (1987), pl. I/14.
- 54 S. Ercegović-Pavlović, 'Srednjovekovna nekropola u Nišu', *Starinar* XXVII (1976), pls I/5, 6, IX/5, 6, XV/1, 2.
- 55 Ercegović-Pavlović 1970 (n. 26), 50–1; Zoll-Adamikowa et al. (n. 40), 113–5.
- 56 In the collection of the 7th Ephorate of Byzantine Antiquities (Inv. nos M 241-242): Papanikola-Bakirtzi (n. 19), 435, no. 565, fig. 565.
- 57 It is kept in the archaeological site of Nea Anchialos (Inv. no. E.E 5.1-E.E 5.6); *ibid.*, 434, no. 562, fig. 562.
- 58 It belongs to the Byzantine and Post-Byzantine Collection in Chania (Inv. no. X 3/24.10.97): Albani (n. 32), fig. 20.
- 59 It is kept in the archaeological site of Nea Anchialos (Inv. no. E.E 86.1-E.E 86.4): Papanikola-Bakirtzi (n. 19), 562, no. 779, fig. 779.
- 60 *Ibid.*, 561–2, no. 778, fig. 778.
- 61 Marianović-Vujović (n. 34), fig. 15.
- 62 Petrović (n. 50), fig. 29.
- 63 V. Jovanović, 'Razmatranja o srednjovekovnoj nekropoli Lukovit-Mušat kod Loveča u Bugarskoj', *Starinar* XXXVIII (1987), pl. I/tombs 5, 9, 10, pl. II/tombs 27, 21, 17, 18, 19, 20, pl. III/tomb 52, pl. IV/tomb 80, pl. V/tombs 95, 101, 118, 128, 134.
- 64 M. Janković, 'Dve srednjovekovne nekropole u istočnoj Srbiji', *Starinar* XXIV-XXV (1973–74), pls IV/12, VI/4, VIII/5, 6.
- 65 *Ibid.*, pl. XI/5, 6.
- 66 M. Popović and V. Ivanišević, 'Grad Braničevo u srednjem veku', *Starinar* XXXIX (1998), fig. 34/3.
- 67 D. Minić, 'Ribnica - praistorijsko i antičko nalazište, srednjovekovno naselje sa nekropolom', *Starinar* XXXIII-IV (1982–83), pl. IV/6.
- 68 G. Marjanović, 'Srednjovekovni grob iz okoline Požarevca', *Starinar* XVIII (1967), pl. I/5.
- 69 Davidson (n. 22), 252, pl. 109, no. 2024.
- 70 N. B. Drandakis, *Βυζαντινές τοιχογραφίες της Μέσα Μάνης* (Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας, αρ. 141), Athens, 1995, 148, fig. 10.
- 71 *Ibid.*, 150.
- 72 Inv. nos J269 and J237: Hasson (n. 5), 33, no. 26, figs 26 and 37, no. 32, fig. 32.
- 73 Inv. no. Roger Fund, 1939 (40.170.153): M. Jenkins and M. Keene, *Islamic Jewelry in the Metropolitan Museum of Art*, New York, 1983, 36, no. 15.
- 74 They belong to the Museum of Byzantine Culture (Inv. no. BKO 262/2): Kypraiou (n. 7), 224, no. 274.
- 75 G. Marjanović-Vujović, 'Rasprostranjenost naušnica naroskanog tipa u Srbiji', *Starinar* XXVII (1976), 108–9, pls I, II, III/1.
- 76 Davidson (n. 22), 250, 252, no. 2025.
- 77 *Ibid.*, 250; see, for example, 252–3, nos 2025–29, pl. 108.
- 78 *Ibid.*, 252, 108, no. 2025.
- 79 D. Minić (n. 53), pl. I/1; Janković (n. 64), pl. XII/3.
- 80 Davidson (n. 22), 252–3, no. 2028, pl. 108.
- 81 Petrikaki (n. 12), pl. 69.
- 82 It belongs to the the collection of the 7th Ephorate of Byzantine Antiquities (Inv. no. M 111-112): Papanikola-Bakirtzi (n. 19), 434, fig. 560, no. 560.
- 83 Jovanović (n. 63), pl. II/tomb 6, pl. III/tombs 26, 27.
- 84 Cf. A. Bosselmann-Ruickbie, 'Mittelbyzantinische Ohringe mit Filigran und Granulation', in L. Wamser (ed.), *Die Welt von Byzanz - Europas östliches Erbe. Glanz, Krisen und Fortleben einer tausendjährigen Kultur*, Munich, 2004, 324.

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- 86 R.M. Harrison, *Excavations at Saraçane in Istanbul. Vol. 1. The Excavations, Structures, Architectural Decoration, Small Finds, Coins, Bones, and Molluscs*, Princeton, 1986, 267, no. 597.
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- 90 O. Grabar, 'The Shared Culture of Objects', in H. Maguire (ed.), *Byzantine Court Culture from 829 to 1204*, Washington DC, 1997, 115–29, esp. 122, 124; S.M. Stern, 'An Embassy of the Byzantine Emperor to the Fatimid Caliph Al-Mu'izz', *Byzantion* XX (1950), 244; Canard (n. 2), 55; P. Soucek, 'Byzantium and the Islamic East', in Evans and Wixom (n. 3), 407–9.
- 91 Canard (n. 2), 39, 54; Soucek (n. 90), 404; Gerolymatou (n. 2), 92–4, 108, 111, 117–18, 123–7, 134–6.
- 92 A. Ballian, 'Byzantium and Islam: Relations and Convergences', in M. Evangelatou *et al.* (eds), *Byzantium: An Oecumenical Empire. Byzantine Hours. Works and Days in Byzantium*, Athens, 2002, 237.
- 93 Corović-Ljubinković (n. 6), 37–9; Gerolymatou (n. 2), 95, 172. The 10th and 11th centuries are considered as the period of the densest Byzantine imports into Slavic countries since the Justinianic era as well as that of the greatest cultural influences: Ercegović-Pavlović (n. 27), 51; L. Niederle, *Manuel de l'antiquité slave, tome II: La civilisation*, Paris, 1926, 86, 218. D. Obolensky, *The Byzantine Commonwealth. Eastern Europe, 500–1453*, London, 1971, 272–90.

'Temple Pendants' in Medieval Rus': How were they Worn?

Natalija Ristovska

In Byzantium, as in other medieval societies, ear ornaments represented one of the most prominent and certainly most ubiquitous elements of the female attire. Although numerous Byzantine ornaments falling into this category have been published to date, little attention has been dedicated to tackling the problem of how such objects were actually worn. This is particularly true for the ornaments which, based on certain criteria, are believed not to have been worn by threading through the earlobe, but to have been suspended by various means from the hair or headdress; for better or worse, these are generally referred to by scholars as 'temple pendants',¹ or 'headdress rings'.²

A useful contribution towards the understanding of the wearing practices of Byzantine and other medieval ear ornaments is supplied by archaeological evidence from the territory of medieval Rus', which has accumulated in the course of the past century or so. Recent studies by scholars such as M. A. Saburova, A. S. Agapov and T. G. Saračeva³ have put such evidence to good use and introduced fascinating new insights into the old debate of how such ornaments were worn in Rus'. It is the aim of the present paper to provide a brief review of the Rus' evidence and of the recent developments on the subject, in view of the implications this material may have for the study of Byzantine and other contemporary ear ornaments.⁴ The discussion will focus on those ornaments which were worn suspended from the hair or headdress (rather than being worn through the earlobe), since I believe that the latter objects have been poorly understood in past scholarship on Byzantine jewellery.

The study of the wearing methods in medieval Rus' consists entirely of archaeological evidence, as ear ornaments with suspension equipment are neither mentioned in the written sources, nor depicted in the extant visual sources.⁵ However, before proceeding to examine the Rus' evidence in question, it is necessary to note first the distinction made by Russian and Ukrainian scholars between the different categories of ear or temple ornaments, as this issue is closely related to the perception of how the respective objects were worn.

Two categories are of interest here. The first comprises hollow crescent-shaped, circular and star-shaped ear ornaments, since the late 19th century uniformly referred to as 'kolty' (колты) or 'kolti' (колти) in Russian and Ukrainian respectively (Pls 1–4).⁶ The term, which is now used exclusively to designate this type of medieval jewellery, originally derives from the Old Slavonic word for earrings or ear ornaments (къльѣтки/колотки/колки),⁷ variants of which were still in use on the territory of Russia and Ukraine in the second half of the 19th century,⁸ when the artefacts now generally known as 'kolty' were first published. The second category consists of ornaments labelled descriptively by archaeologists as 'temple rings' (Rus. височные кольца, Ukr. скроневі кільця), after the

part of the head at which they are believed to have been worn. These include a wide range of types, from simple loops of wire with or without spiral or S-shaped terminals, through hoops decorated with one, three or more beads or rhomboid sheets, to elaborate crescent-shaped ornaments with triangular or axe-like protrusions along their lower rim (Pl. 5).⁹ Some of the ear ornaments of the latter types are also occasionally called 'earrings' (Rus. серьги/сережки, Ukr. серги/сережки),¹⁰ a term rarely applied to kolty.¹¹ As extant written sources indicate, all these terms were indeed used in medieval Rus' to designate ear ornaments (колци: 11th century; къльѣтки/колотки: 12th century; серги: 14th century),¹² but there is little evidence to suggest the shape, construction or wearing method of the objects they referred to.¹³ A notable exception is the reference to ear ornaments in the 11th-century *Lection on the life and slaying of the blessed martyrs Boris and Gleb*, according to which objects designated as колци were worn on the ears,¹⁴ presumably threaded through the earlobe. Hence, it is clear that, despite its use of historic terms, the present-day archaeological taxonomy of Rus' ear ornaments does not reflect the medieval written evidence, as it is entirely based on modern pre-conceptions. It will moreover become evident below that the archaeological evidence from medieval Rus' burials also does not support the rigid classification framework which has been heretofore applied to it.

Kolty

The discussion on how kolty were worn has mainly revolved around a particular type of strap which occurs in pairs in hoards on the territory of medieval Rus'. These are made either of gold and silver plates in circular, quatrefoil, or rectangular shape connected to one another by a hinge joint,¹⁵ or of ribbed semi-cylinders made in the same materials and held together by metal or linen threads.¹⁶ Both variants terminate at one end in a small chain, and at the other in an open hoop which was probably secured by a small pin or wire. The most commonly reproduced reconstruction, proposed first by B. A. Rybakov in the 1940s, has these straps – with kolty attached at the lower end – suspended from the top of a tall hat or crown, dangling freely while reaching down as far as the chest or shoulders.¹⁷ Although Rybakov's arguments regarding this matter were plausibly refuted by G. F. Korzhuhina shortly thereafter¹⁸ and scholars are far from unanimous on the use of the straps (which have been variously identified as suspension chains, necklaces, and bracelets),¹⁹ his reconstruction still remains influential and different versions of it continue to be reproduced in recent publications (Pl. 6).²⁰

Subsequent archaeological finds have, however, shown that Rybakov's view concerning the wearing of kolty can no longer be sustained. Thus, a silver pair, found *in situ* within a female burial at Rajkovetskoe Gorodišče, and which were attached to



Plate 1 Gold and enamelled *kolt* found at Knjaža Gora (12th–13th century)



Plate 2 Silver and niello *kolt* found at Kiev (12th–13th century)



Plate 3 *Kolt* of lead-tin alloy found at Novgorod (13th century)



Plate 4 Gold *kolt* found at Kiev (12th–13th century)



Plate 5 'Temple rings' found on the territory of medieval Rus' (10th/11th–14th century)



Plate 6 Reconstruction of the wearing style of crescent-shaped *kolty* (M. Rusjaeva)



Plates 8a–b Straps with *kolty* attached, found at Staraja Rjazan' (12th–13th century)



Plate 7 Silver headband with a pair of *kolty* attached to it, Rajkovetskoe Gorodišče (12th–13th century)

two silver straps of the type employed in Rybakov's reconstruction,²¹ leaves little room for doubt as to how these ornaments had been worn: the straps had evidently been secured to each other to form a diadem around the head, while the *kolty* had been suspended at the sides from the short chains connecting the straps (Pl. 7). This wearing method is further substantiated by the finds in a hoard unearthed in 1911 near the Tithe church in Kiev, where the end chains of two gold straps of the second variant are said to have been threaded through the suspension hoops of enamelled *kolty* made in the same material.²² While two hoards found at Staraja Rjazan'²³ seem to suggest that metal straps constructed of ribbed semi-cylindrical elements were indeed used for suspending the *kolty* from the headdress,²⁴ it should be noted that these are significantly shorter than the straps employed in Rybakov's

reconstruction²⁵ and terminate at both ends in a small closed hoop, one presumably for attaching the *kolt* to the strap, the other for fastening the strap to the headdress (Pls 8a–b and 9). Organic remains found on some of the Rjazan' fragments indicate that the semi-cylindrical elements and the triangular terminals had been held together by coarse linen threads, while the entire strap had been sewed onto a leather lining.²⁶

There may also have been alternative, hitherto unidentified, methods for securing *kolty* to the headdress.²⁷ One, or more, of them probably involved the large coiled wire devices which were attached to the suspension hoop of the silver *kolty* found in a hoard at Svjatoe Ozero near Černigov (Pl. 10).²⁸ Identical objects, termed 'temple rings' by the archaeologists who published them, have recently turned up in another hoard at Gubin (in Ukraine) together with two pairs of



Plate 9 Reconstruction of the wearing style of the star-shaped *kolty* found at Staraja Rjazan' (V.P. Frolov)



Plate 10 Silver *kolty* with a coiled hoop attached to it, found at Svjatoe Ozero (12th–13th century)



Plate 11 Silver *kolty* and coiled wire hoops found at Gubin (12th–13th century)

silver *kolty* and other jewellery (Pl. II). In the latter case, the coiled wire hoops occur as two sets of twelve pieces and are made of the same material as the *kolty*.²⁹ It may be argued that a single hoop, as those found at Svjatoe Ozero, could have facilitated the attachment of the *kolty* to a separate suspension chain or strap, or alternatively, served for fastening the *kolty* directly to the hair or headdress in a way similar to a modern hair pin; a series of interlinked hoops could have been used as a chain for suspending the *kolty* from the headdress. As will be mentioned below, the use of both wearing styles, involving comparable hoops, has been attested for other types of ornaments by finds in medieval Rus' burials.³⁰

'Temple rings'

The objects normally referred to as 'temple rings' by Russian and Ukrainian scholars seem to have involved a wider range of wearing styles than those attested for *kolty*. Excavations of medieval cemeteries in northern Russia, where the soil conditions are more favourable for the preservation of organic materials, have, in fact, shown that the same types of 'temple rings' were worn in a number of different ways: threaded through the earlobe, secured in the hair, attached directly to the headdress, or fastened to a vertical strap which was secured to the headdress.

As established by forensic analysis of human skin found in medieval Rus' burials, piercing along the entire length of the earlobe and the upper part of the ear made it possible for two to

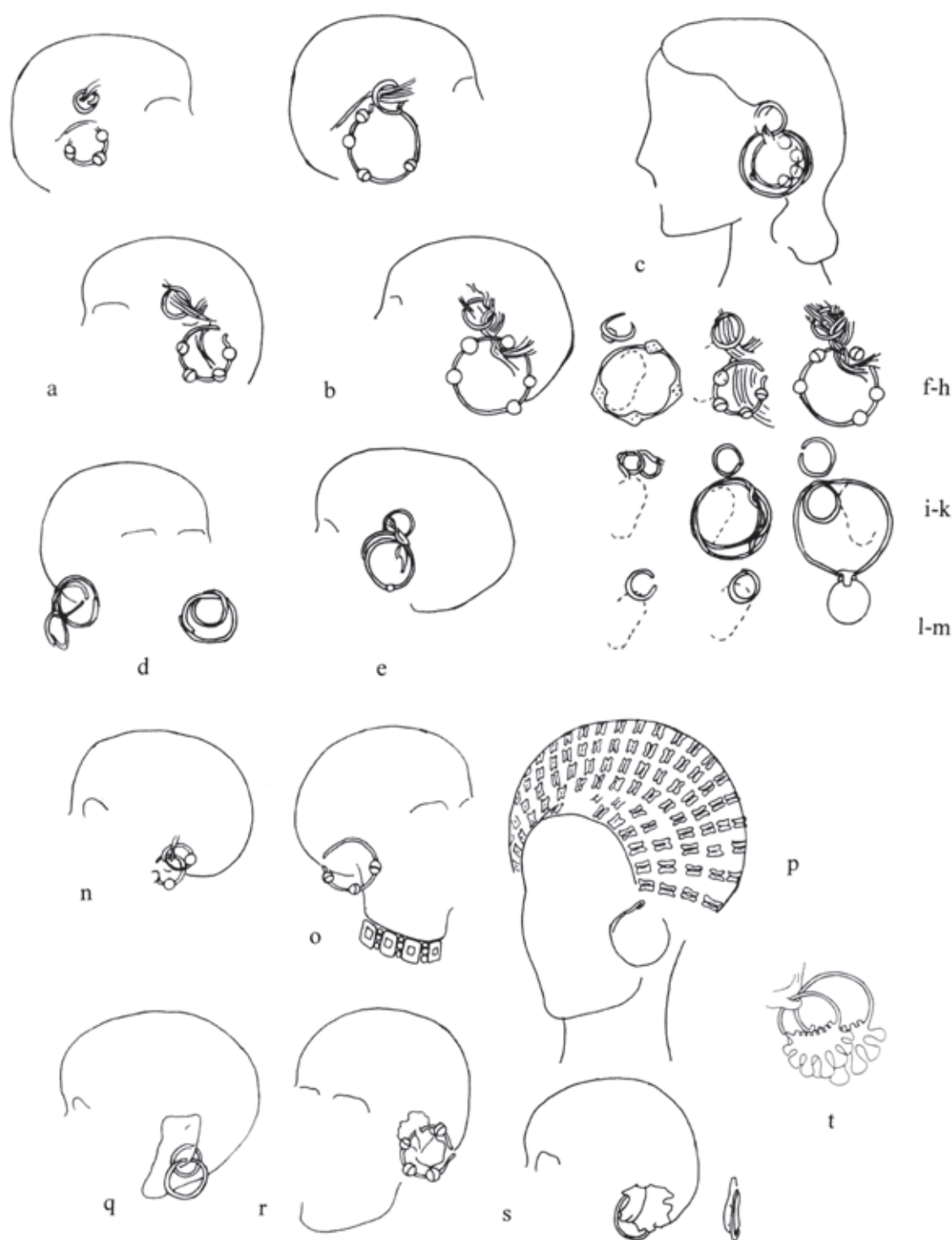
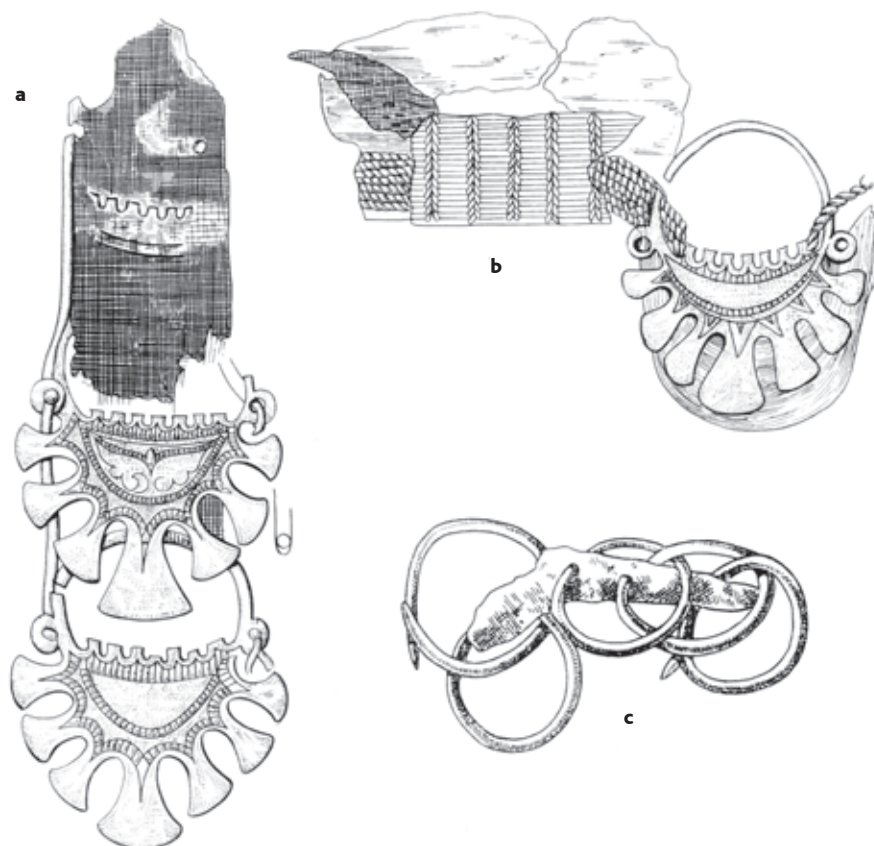


Plate 12 Methods of wearing 'temple rings' in Rus'

eight rings to be simultaneously worn on the ear (Pls 12n, o, q, t and 14g); there were also instances when more than one ornament was threaded through a single opening.³¹ It is noteworthy that some of these pieces were of not inconsiderable size, with a suspension hoop ranging in thickness between 1.4 and 2mm. Human remains in burials, together with the precise location of ornaments on the body (often revealed by oxide staining on the skeleton), have moreover shown that up to 12 rings were worn entangled in the hair at each side of the head, either in a cluster at the level of the temples or ears (Pls 12a–k), or arranged in a single row in the area between the forehead and the shoulders (Pls 14f–g), the latter style usually occurring with simple hoops of small

size.³² All ornaments, irrespective of type, size and the style preferred, were worn entangled in the hair individually (Pls 12a–b, f–h, k–m and 14f–g),³³ or interlinked as a chain (Pls 12c–e, i–j, and 14h).³⁴ In fact, it was not uncommon for one or two large or more elaborate ornaments to be suspended from a small hoop secured in the hair, which in this case acted as a hair pin (Pls 12c, e), nor for them to be directly attached to the hair under one or more small hoops secured in the same way (Pls 12a–b, f–h, j). In some cases, it has been established that the ornaments were threaded through – or were secured by – plaits or twisted sections of hair which ran from the temples to the back of the head (Pls 12a–b, e, g–h).³⁵

Plate 13 Remains of headdresses with 'temple rings' attached



On the other hand, organic remains of headgear in burials (**Pl. 13**) have revealed that one or more rings were worn threaded through leather and textile straps hanging from a headband or hat (**Pls 14c, e**).³⁶ The ornaments, in such instances, were often arranged on the straps one above the other in a single row stretching from the level of the temples to the ears or neck. An alternative wearing style has been attested by metal suspension equipment, which included straps constructed of semi-cylindrical elements and triangular terminals,³⁷ or chains made up of series of interlinked (but detachable) small hoops (**Pl. 14h**).³⁸ In both cases, a single ornament, usually consisting of a ring with three beads, was suspended from the lower end of each chain or strap. Finally, the same sort of evidence indicates that one or more ornaments were worn attached directly to the headdress: they were either arranged in a horizontal row on a metal headband, or threaded through a textile (or felt) headband, hat or headscarf (**Pls 12p, r-s, and 14a-b, d**), being usually clustered at the temples or next to the ears.³⁹

Altogether, a number of general observations pertaining to the ear or temple rings found in the territory of Rus' may prove instructive for the future study of medieval ear ornaments recovered in excavations elsewhere (including the territory of the Byzantine Empire).

1. It is noteworthy that ornaments belonging to a single type were worn using more than one method of suspension. In fact, almost all types were evidently worn threaded through the earlobe and suspended from the hair or headdress.
2. More than one ornament was often worn at each side of the head at the same time.
3. It was not unusual for the number of ornaments worn at one time to differ between the left and right side of the head.

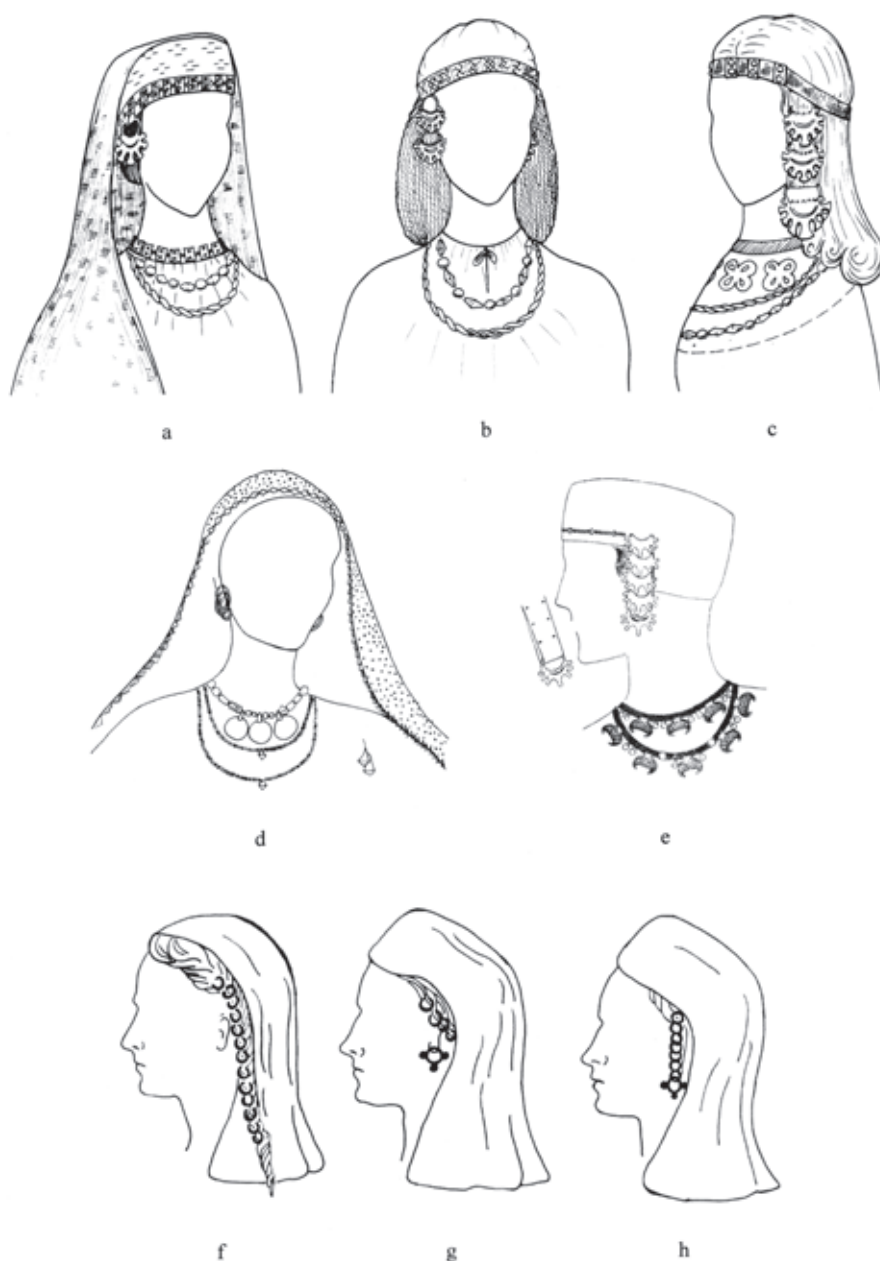
4. The wearing of combinations of different ornament types on each side of the head was common.
5. The same or similar types of ornaments were worn at different spots on the sides of the head, anywhere between the temples and the neck; simple hoops of small size were also worn in the hair or headdress as far as the lower part of the neck or shoulders.
6. The thickness of the suspension hoop, the securing device and the size of the individual pieces does not seem to point to a single wearing method. Relatively large ornaments with a thick suspension hoop and/or overlapping or tied terminals were worn threaded through the earlobe, while simple, small and lightweight hoops were worn attached to the hair or headdress.

Conclusion

Archaeological finds from the territory of medieval Rus' provide particularly revealing evidence concerning the wearing methods of medieval ear ornaments. Several conclusions may be drawn from the survey of this material.

While the objects in modern scholarship generally known as *kolty* were evidently worn with suspension equipment (coiled wire hoops, chains or metal straps), those termed 'temple rings' employed a wide range of suspension methods which, due to the soil conditions in burials as well as other factors, have been heretofore little attested elsewhere. These include styles such as the wearing of ornaments on the ear by threading the suspension hoop through the earlobe; the securing of ornaments in the hair by plaits or twisted sections, directly or by means of a small hoop; attaching directly to a metal or textile headband; attaching directly to the veil or headscarf; suspension from the headdress by means of interlinked but detachable hoops forming a chain; as well as

Plate 14 Methods of wearing 'temple rings' in Rus' (M.A. Saburova)



suspending from vertically-arranged leather or textile straps, which were, in turn, secured to a hat, headband or veil. The finds in burials, moreover, attest to other wearing peculiarities of the ornaments in question, particularly concerning the number of pieces worn on each side of the head at one time, the combining of different ornament types, and the exact spot on the head where these objects were worn.

The Rus' material does not only provide us with a unique glimpse into the variety of evidence available to the archaeologist upon careful systematic excavation; it also offers an opportunity for valuable methodological lessons to be learned. Closer inspection of the scholarship on the Rus' finds, for instance, reveals that the rigid archaeological taxonomies which were applied in the past to the ornaments in question fall short of adequately interpreting the complexities posed by the newly-excavated archaeological material, and are the cause of confusion and misinterpretation. On the one hand, entire types (as defined by shape) were attributed *en bloc* to a single category of ornaments, either 'temple rings' or 'earrings'. On the other hand, examples of the same types of ornaments were variously labelled 'temple rings' and 'earrings' within a

single publication for no apparent reason (see note 10). Recent studies (see note 3), have shown that scholars studying this material need to allow for more flexibility and demonstrate more consistency in the classification and interpretation of the available artefacts. Objects labelled 'temple rings', for instance, are now known to have been worn threaded through the earlobe as well as suspended from the hair and headdress; in burials, they occur on the head anywhere between the temples and the neck. Moreover, there are some indications that the wearing of *kolty* involved the same suspension methods as those attested for some of the 'temple rings' (metal straps as well as a single hoop, or multiple hoops interlinked as a chain), despite the fact that they were considered two separate categories of ornaments. We are certainly faced with similar methodological difficulties in the study of Byzantine and other ear ornaments: neat classification schemes pertaining to what are, to a large extent, matters of personal choice, and based on evidence from only a few artefacts, prove difficult to sustain. Keeping abreast with newly excavated material, we may well have to repeatedly readjust our perceptions (and pre-conceptions) on the use of the artefacts we study.

Notes

- 1 W.D. Wixom, 'Temple pendant and stick', in K.R. Brown *et al.*, 'Medieval Art and the Cloisters', *The Metropolitan Museum of Art Bulletin*, n.s., 49/2 (1991), 15; W.D. Wixom, 'Two cloisonné enamel pendants: the New York temple pendant and the Cleveland enkolpion', in C. Moss and K. Kiefer (eds.), *Byzantine East, Latin West: art-historical studies in honor of Kurt Weitzmann*, Princeton, 1995, 659–62; W.D. Wixom, 'Temple pendant and stick', in H.C. Evans and W.D. Wixom (eds.), *The Glory of Byzantium: art and culture of the Middle Byzantine Era, AD 843–1261*, New York, 1997, 246–7, no. 170; P.S. Griffin, 'Jewellery from Kiev', *Jewellery Studies* 6 (1993), 5–18.
- 2 U. Fiedler, *Studien zu Gräberfeldern des 6. bis 9. Jahrhunderts an der unteren Donau*, I, Bonn, 1992, 170–80.
- 3 M.A. Saburova, 'Ženskij golovnoj ubor u Slavjan (po materialam Vologodskoj ekspeditsii)', *Sovetskaja arheologija* (1974/2), 85–97; M.A. Saburova, 'O ženskih golovnyh uborah s žestkoj osnovoj v pamjatnikah domongol'skoj Rusi', *Kratkie soobščeniia Instituta arheologii* 144 (1975), 18–22; M.A. Saburova, 'Drevnerusskij kostjum', in B.A. Kolčín and T.I. Makarova (eds.), *Drevnjaja Rus': byt i kul'tura*, Moscow, 1997, 93–109; M.A. Saburova and M.V. Sedova, 'Nekropol' Suzdalja', in I.P. Rusanova (ed.), *Kul'tura i iskusstvo srednevekovogo goroda*, Moscow, 1984, 91–130; A.S. Agapov and T.G. Saračeva, 'O sposobah nošenija viso čnyh kolets', *Rossijskaja arheologija* (1997/1), 99–108.
- 4 The material included in the present paper is part of a larger discussion dealing with the Byzantine wearing practices of ear ornaments which will be published elsewhere.
- 5 G.F. Korzuhina, *Russkie klady IX–XIII vv.*, Moscow/Leningrad, 1954, 53–55. Only a few mentions of ear ornaments occur in Rus' written sources of the 11th–15th centuries. They provide little additional information apart from a brief reference to the materials of which these objects were made: G. N. Lukina, 'Nazvanija predmetov ukrašenija v jazyke pamjatnikov drevnerusskoj pis'mennosti XI–XIV vv.', in R.I. Avanesov *et al.* (eds.), *Voprosy slovoobrazovanija i leksikologii drevnerusskogo jazyka*, Moscow, 1974, 248, 250–1; A.A. Zaliznjak, *Drevnenovgorodskij dialekt*, II, Moscow, 2004 (2nd ed.), 267–8: no. 644; 359–60: no. 429; 372–3: no. 335.
- 6 See T.I. Makarova, *Peregorodčatye emali drevnej Rusi*, Moscow, 1975, pls 1–5 and figs 5–6; W. Seipel (ed.), *Gold aus Kiew: 170 Meisterwerke aus der Schatzkammer der Ukraine*, Vienna, 1993, figs on 291–3, 295, 297, 320–1, nos 114–18, 132; Evans and Wixom (n. 1), figs on 310–11, 314, no. 212A–G, 214A; D.S. Lihačev *et al.*, *Velikaja Rus': istorija i hudožestvennaja kul'tura X–XVII veka*, Moscow, 1994, col. pls III: 26, 29, 31, 33–4, 36a–b; col. pl. V: 26; B.A. Rybakov, *Remeslo drevnej Rusi*, Moscow, 1948, figs 80, 83, 89; B.A. Rybakov, *Russkoe prikladnoe iskusstvo X–XIII vekov*, Leningrad, 1971, figs 24–5, 37, 41, 49–56, 143; M.V. Sedova, 'Juvelirnye izdelija drevnego Novgoroda (X–XV vv.)', in A.V. Artsihovskij and B.A. Kolčín (eds.), *Trudy novgorodskoj arheologičeskoj ekspeditsii*, II, Materialy i issledovanija po arheologii SSSR 65, Moscow, 1959, figs 1/13–17; M.V. Sedova, *Juvelirnye izdelija drevnego Novgoroda (X–XV vv.)*, Moscow, 1981, figs 1/5, 5/1–11.
- 7 Lukina (n. 5), 250–1; I.I. Sreznevskij, *Materialy dlja slovara drevnerusskogo jazyka*, Moscow, 1958 (reprint of the 1893 edition), s.v. 'Колтки'; *Slovar' russkogo jazyka XI–XVII vv.* (hereafter *SRJa*), VII, Moscow, 1980, s.v. 'Колтки'.
- 8 In fact, the word 'koltki' and its variants continued to be used in local dialects well into the 20th century. In the modern period, these words denoted earrings, earring pendants, or earrings with pendants: cf. N.P. Kondakov, *Geschichte und Denkmäler des byzantinischen Emails*, Frankfurt, 1892, 343–4; *Slovar' russkikh narodnyh govorov*, XIV, Leningrad, 1978, s.v. 'Кóлткы/колткы', 'Колтóчки', 'Кóлтуши/колтúши', 'Колтúшка', 'Колтúшки/колтушки', 'Колтушóк'; Lukina (n. 5), 250–1; *SRJa* (n. 7), VII, s.v. 'Колты'; *Bol'shaja Sovetskaja Entsiklopedija* (hereafter *BSE*), XII, Moscow, 1973 (3rd ed.), s.v. 'Колт'. The claims that in modern Russian the word 'kolty' designates 'temple rings' (K.R. Brown, 'Russo-Byzantine jewellery in the Metropolitan Museum of Art', *Apollo* 111/215 [1980], 6), or indeed, rings or hoops (Griffin [n. 1], 8) are, thus, incorrect. In the scholarship of the region, the archaeological term 'temple rings', to the best of my knowledge, has never been used for the ornaments known as 'kolty'. The erroneous claim that 'kolty' denotes rings or hoops could have arisen from the confusion of the word колт with the modern кольцо (= ring or hoop).
- 9 See Sedova 1959 (n. 6), figs 1/1–10; Rybakov 1948 (n. 6), figs 16, 24, 130–31; Rybakov 1971 (n. 6), figs 5, 7–10; R.L. Rozenfel'dt, 'Raskopki kurganov u s. Bitjagovo v 1968–1970 gg.', *Sovetskaja arheologija* (1973/1), figs 3/1–17, 21–4 on 195; Saburova 1974 (n. 3), fig. 5 on 92; E.A. Rjabinin, *Kostromskoe Povolž'e v epohu srednevekov'ja*, Leningrad, 1986, pl. 1; T.I. Makarova *et al.*, 'Ukrašenija iz dragotsennyh metallov, splavov, stekla', in Kolčín and Makarova (n. 3), pl. 51.
- 10 For instance, in Korzuhina (n. 5), and Rybakov 1971 (n. 6), 36, 38. This taxonomic inconsistency becomes particularly striking in cases where ear ornaments of the same type are called both 'earrings' and 'temple rings' within a single publication, despite the fact that some of them were found in hoards and thus lack reliable evidence for the way in which they were worn. Compare, for instance, nos 119–23 (= Ohrgehänge) with no. 135 (= Schläfenring) in Seipel (n. 6), and nos 93, 95–6, 100–01, 103 and 105 (= серьги) to no. 97 (= височное кольцо) in V. M. Vasilenko, *Russkoe prikladnoe iskusstvo: istoki i stanovlenie*, Moscow, 1977.
- 11 The word 'earrings' was used for ornaments of this type mostly in early publications, when the relevance of the term 'kolty' for medieval artefacts was still being discussed (Kondakov [n. 8], 343–4; N. Kondakov, *Russkie klady*, St Petersburg, 1896, 195–6). Conversely, in the *Large Soviet Encyclopedia*, 'kolty' is described as a pendant attached to the headdress, rather than an earring (*BSE* [n. 8], XII, s.v. 'Колт').
- 12 Zaliznjak (n. 5), 267–8: no. 644, and 372–3: no. 335; Lukina (n. 5), 248, 250–1; Sreznevskij (n. 7), s.v. 'Колтки'; *SRJa* (n. 7), VII, s.v. 'Колтки'. The word усе́ра.зи/оу́се́ра.зи is also attested for ear ornaments in 12th–14th-century Rus' sources, but seems to have gone out of use shortly thereafter (Zaliznjak [n. 5], 359–60, no. 429; Lukina [n. 5], 250).
- 13 Evidence of this type exists only for the more recent periods. In the 18th–20th centuries, as well as now, the word серьги/серги/сережки denotes earrings, while the word кольцо/кільце signifies a ring, hoop, link of a chain and, in general, any object shaped as a circle or hoop (*Slovar' russkogo jazyka XVIII veka*, X, St Petersburg, 1998, s.v. 'Колцо'). For the meaning of the word колтки and its variants in the 19th–20th centuries, see n. 8 above.
- 14 И се вънзѣпу испадоста єи златни колци, иже носаше въ ушию своєю. D.I. Abramovič and L. Müller, *Die altrussischen Hagiographischen Erzählungen und liturgischen Dichtungen über die Heiligen Boris und Gleb*, Munich, 1967, 24; Lukina (n. 5), 248.
- 15 For illustrations, see Makarova (n. 6), figs 5–6 and pls 6–10; Evans and Wixom (n. 1), fig. on 312, no. 213A–B; Lihačev *et al.* (n. 6), col. pl. III: 31; A. L. Mongajt, *Staraja Rjazan'*, Materialy i issledovanija po arheologii SSSR 49, Moscow, 1955, fig. 115/1; Makarova *et al.* (n. 9), pl. 42/11.
- 16 For illustrations, see Rybakov 1948 (n. 6), fig. 82 on 316; Seipel (n. 6), figs on 295: nos 116–17, and 320: no. 133; Lihačev *et al.* (n. 6), col. pl. III: 29.
- 17 B.A. Rybakov, 'Znaki sobstvennosti v knjažeskom hozjajstve Kievskoj Rusi X–XII vv.', *Sovetskaja arheologija* 6 (1940), 251; Rybakov 1948 (n. 6), 316–17, 338, 383–4; B.A. Rybakov, 'Drevnosti Černigova', in N.N. Voronin (ed.), *Materialy i issledovanija po arheologii drevnerusskikh gorodov*, I, Materialy i issledovanija po arheologii SSSR 11, Moscow/Leningrad, 1949, 58, figs 23 (top) and 25 (middle).
- 18 Korzuhina (n. 5), 53–4.
- 19 Rybakov 1948 (n. 6), 316–17, 383; Makarova (n. 6), 40; Griffin (n. 1), 6, 8.
- 20 For instance, see Seipel (n. 6), fig. 13 on 52 (after M. Rusjaeva); Saburova 1997 (n. 3), pls 71, 73.
- 21 V.K. Gončarov, *Rajkovetskoe gorodišče*, Kiev, 1950, 107–08.
- 22 Korzuhina (n. 5), 54, and 109, no. 69.
- 23 One hoard contained three pairs (and some fragments) of silver star-shaped kolty, as well as semi-cylindrical and triangular elements of the same material which have been reconstructed as four straps for the suspension of kolty. The other hoard contained a pair of circular kolty made of silver and decorated with niello, and semi-cylindrical elements reconstructed as two suspension straps. Both hoards also consisted of other objects: V. P. Darkevič and V. P. Frolov, 'Starorjazanskij klad 1974 g.', in T.V. Nikolaeva (ed.), *Drevnjaja Rus' i Slavjane*, Moscow, 1978, 342–3 and figs 1–5 on 344–8; V.P. Darkevič and A.L. Mongajt, *Klad iz Staroj Rjazani*, Moscow, 1978, 6, 9, nos 3–4, and pls 2–3. For another hoard found at Staraja Rjazan' containing a single strap of the same type, see V.P. Darkevič and A.L. Mongajt, 'Starorjazanskije klady 1967 g.', *Sovetskaja*

- arheologija* (1972/2), 207, and fig. 3 on 208.
- 24 If the straps were indeed correctly reconstructed. The semi-cylindrical and triangular strap elements were found detached and in fragments, with only part of them surviving and having been subjected to reconstruction.
 - 25 Each of the straps found with the circular *kolty* in the second Rjazan hoard is 15.5cm long in its reconstructed state (Darkevič and Mongajst 1978 [n. 23], 9, nos 3–4). In contrast, the gold straps made of semi-cylindrical segments and ending in a chain and an open hoop which were found near Sahnovka in Ukraine are 22cm long (P. Dandridge and O.Z. Pevny, 'Temple pendants and suspension chains', Evans and Wixom [n. 1], 313, no. 214B). The straps constructed of hinged gold or silver plates were even longer: each of the two complete examples from a gold and enamelled pair found in the Tithe church at Kiev, for instance, measures 31.1cm in length (K.R. Brown, 'Ceremonial ornaments', in Evans and Wixom [n. 1], 313, no. 213A).
 - 26 Darkevič and Mongajst 1972 (n. 23), 207; Darkevič and Frolov (n. 23), 342–43, 351.
 - 27 For instance, neither of the two pairs of *kolty* excavated in burials at Černigov in 1878 and 1883, respectively, are reported to have been accompanied by suspension equipment (Korzuhina [n. 5], 52). This may be due to the summary method of excavation and publication in this period, but could also mean that alternative methods of suspension were used for these objects.
 - 28 Rybakov 1948 (n. 6), figs 77/5 and 83/Б; Rybakov 1949 (n. 17), figs 23 (bottom right), 26 (top right). Korzuhina called these wire devices 'clasp rings' and believed that they were used for the suspension of *kolty* (Korzuhina [n. 5], 138, no. 152/1, and 120–21, no. 103/22).
 - 29 I.S. Vinokur *et al.*, 'Rečovij skarb iz litopisnogo Gubina', *Arheologija* 2003/1, figs 8–9 on 59 and figs 15–16 on 62.
 - 30 See pp. 217–18 above, and Pls 12c,e and 14h. The coiled wire devices appear to be related to 'temple rings' of simple hoop shape with overlapping ends which were found elsewhere on the territory of mediaeval Rus'.
 - 31 Saburova 1974 (n. 3), 85–6, 89–91; Agapov and Saračeva (n. 3), 101–07, figs 1–3.
 - 32 Saburova 1974 (n. 3), 86, 88; Saburova and Sedova (n. 3), 114–18.
 - 33 Saburova 1997 (n. 3), 108, pl. 75/10.
 - 34 *Ibid.*, 108, pl. 75/9.
 - 35 Saburova 1974 (n. 3), 86–8, 91.
 - 36 *Ibid.*, 88; Saburova 1975 (n. 3), 18–19; Saburova 1997 (n. 3), 108, pl. 73/3. It should be noted that reports on traces of 'leather' headgear and suspension equipment in burials should be treated with caution, as some of the fragments believed to be straps on which the 'temple rings' were suspended, upon forensic analysis turned out to be pieces of human ears: see Agapov and Saračeva (n. 3).
 - 37 Saburova 1997 (n. 3), 108, pl. 75/13.
 - 38 *Ibid.*, 108, pl. 75/9.
 - 39 E.A. Šinakov, 'Naselenie verhnego tečenija reki Psěl v XI–XII vv. (po materialam Gočevskogo arheološkičeskogo kompleksa)', *Vestnik Moskovskogo universiteta*, ser. 8, *Istorija* (1982/2), 93; Saburova 1974 (n. 3), 88–9; Saburova 1997 (n. 3), 108–09, pls 78/1 and 78/3. For the parallel use of hoop-like ornaments on finds from Poland and the Czech Republic, see P.M. Barford, *The Early Slavs: culture and society in Early Medieval Eastern Europe*, London, 2001, fig. 37 (bottom left) on 361, and J. Schráníl, *Die Vorgeschichte Böhmens und Mährens*, Berlin/Leipzig, 1928, 297–8, pl. LXVIII/8.

Jewellery from Princely Kiev and Byzantine Influence

Ljudmila Pekarska

Kiev, one of the most ancient cities of Europe, was for three centuries the capital of the powerful East Slavonic state of Kievan Rus' (10th–13th centuries). Prince Vladimir the Great, ruler of Kievan Rus' (r. 980–1015) introduced Christianity to Rus' from Byzantium, making it the new state religion in 988. The event marked the beginning of a new era in art for Rus' in general and for Kiev in particular, which accessed and absorbed the rich culture of the Byzantine Empire. Strategically located on the steep banks of the river Dnieper, Kiev became the focal point of contact between Rus' and the Byzantine Empire.

Kievan Rus' was very active in adopting everything it needed to become a prosperous state. It developed quickly following the construction of the first Rus' Christian stone church – richly decorated with marble, mosaics and frescos – built by Byzantine architects and builders in the 10th century in a courtyard in the centre of Kiev. In the wealthiest and most influential parts of the city, where there was a high concentration of very rich members of princely families, marvellous palaces, stone churches and monasteries were erected surrounded by the building complexes and courtyards of nobles, warriors, administrators, merchants and craftsmen. Local architects, painters and goldsmiths prospered there. In the course of a century Kiev developed into one of the largest international centres in Europe and some Western prelates in the 11th century described Kiev as being 'the rival of Constantinople'.¹ Chronicles glorified Kiev as 'the charm of the

world' and 'the mother of all cities of Rus', and wrote 'Kiev does honour to all the lands of Rus'..., it is the glory of Rus'.

Throughout the 11th and 12th centuries, ecclesiastical and cultural contacts between Byzantium and Rus' continued to flourish. Both architecture and the adornment of churches reflected Byzantine influences and features. The most expensive form of monumental decoration appeared in the interiors of Kievan churches where rich mosaics and frescos depicted events from the life of Christ. Mystical images of individual saints beautified churches while simultaneously seeming to form an integral part of the congregation. Byzantine influence can also be seen in the miniatures of Kievan Rus' illuminated manuscripts, the old Chronicles and in a number of other books. Christian objects of Rus' religious services, such as the magnificent processional crosses, patens, chalices and other sacred vessels further enhanced the rich liturgical tradition of the Church. The Byzantine Empire not only supplied the craftsmen of ancient Rus' with Christian iconography and objects but the rich goldsmiths' tradition encouraged the development of techniques such as the enamelled-gold technique.

Although Byzantium played an important role in the art of ancient Rus' and the two cultures were closely connected, its influence on the artistic culture of the Kievan state varied during different periods. This is probably why we do not have enough evidence to confirm the full extent of the deep interaction between the two cultures in the field of jewellery



Plate 1a Gold and enamel *kolt* with two birds and a flower, London, British Museum (PE 81,8-2,3)



Plate 1b Gold and enamel *kolt* with two birds flanking a tree of life, Muzei Istorychnykh Koshtovnostey Ukrainy (hereafter MIKU)



Plate 2 Gold and enamel *kolty* with a bird moving to right, MIKU



Plate 3 Gold and enamel *kolty* with female-headed sirens, MIKU

during the 11th to 12th century. Moreover, Byzantine jewellery itself (earrings, bracelets, finger-rings) remains better known from earlier examples of the 4th to the 7th centuries. From the second half of the 11th century, one of the most remarkable periods in the 1000-year development of Byzantine culture, the identifiable number of Byzantine or Constantinopolitan pieces of jewellery is very limited, as it is from later periods.

In contrast significant numbers of hoards (close to 70), large and small, were found over the past 200 years, in the central, aristocratic and fortified part of medieval Kiev. Most of them were discovered by accident (during the laying of water-pipes or drains, digging of foundations, creation of roads, etc.), close to old monasteries and churches where during turbulent times they were buried in the ground for their protection. These hoards, which included articles of princely apparel and religious artefacts, consisted mainly of jewellery of high artistic workmanship decorated with polychrome enamel, niello work, filigree, pearls and precious stones. Among them were gold *cloisonné* diadems, temporal pendants known as *kolty*, medallions, ceremonial chains and necklaces as well as silver bracelets, finger-rings, *kolty* decorated with niello and filigree, etc. The discovery of this large amount of jewellery (over 2,000 ornaments) brought to light native Kievan enamelled gold and silver work from the 11th to 12th centuries. Through their shape, style and subject matter, these ornaments indicate that Kiev developed its own goldsmiths' workshops and traditions distinct from the Byzantine heritage.

One of the most fashionable female ceremonial headdress ornaments in Kievan Rus' in the mid-11th and beginning of the 12th century was the gold and *cloisonné* enamel temporal pendants (*kolty*),² which originally contained small pieces of cloth infused with aromatic oils or herbs. Over 20 pairs of these elegant and luxurious ornaments have survived to the present day. Each pair is unique in its design and motifs, suggesting they were all specially commissioned.

The decoration on the gold *cloisonné kolty* as well as on the other enamelled gold jewellery found in Kievan hoards follows traditional designs: most of them depict a pair of birds, rare sirens flanking a tree of life, or a geometric and floral composition (vine tendrils, trefoils and quatrefoils). The depictions of birds in general are popular in gold *cloisonné* Kievan jewellery, but they are most numerous on the *kolty*. Stylistically, the birds fall into several different categories, the main ones being:

- 1) A pair of birds facing each other on either side of a stylised tree of life or a small medallion with a three petalled flower above a triangle (Pls 1a and 1b),
- 2) A single bird in profile moving to right (Pl. 2),
- 3) A pair of sirens (birds with human female heads) flanking a stylised tree of life or an equivalent central composition (Pl. 3).

Such bird compositions originated in Syrian ornaments in use in Asia Minor which were, *via* Byzantium, transmitted to the whole of the barbarian world.³ They were widespread in Byzantine art of the 10th to 12th century.

Working alongside Byzantine artisans, Kievan craftsmen learned varied skills and became masters themselves, particularly in goldsmithing and enamelling. This is why the Kievan interpretation of these Near Eastern and Byzantine motifs displays idiosyncratic details uncharacteristic of the Greek examples. The latter show peacocks (or alternative types of birds) with folded or spread wings, whereas most of the medieval Rus' artefacts show short-necked birds with stocky and static figures, most likely doves. The idea that the dove is a sacred bird came from the Christian tradition: it is associated with the Holy Spirit and symbolises kindness and beauty.

Although the basic design of *kolty* is similar, the details of the depiction of the tree (thin, tall, with trefoil roots and short branches, tied in the middle with a distinct band) and of the



Plates 4 and 5 Pair of gold and enamel *kolty* with two birds (front) and female crowned heads (back), New York, Metropolitan Museum of Art

two birds (one wing folded, the other raised and separate from the body) or sirens with their different type of headdress/crown, tails and plumage, as well as the floral and geometric design on the back of each pair, are different. There are similar examples but none of them is an exact copy of the other pair.

A rare class of these gold and *cloisonné* enamel temporal pendants depict images of saints and isolated heads within enamelled circles. Prior to the present study only three examples of pairs with crowned heads were known among Kievan Rus' gold and *cloisonné* enamel *kolty*. All of them were found in hoards together with other precious jewellery in the ancient central part of medieval Kiev.

The first pair to be considered, found in July 1906 and now preserved in the Metropolitan Museum of Art, New York, is less well-known in the corpus of medieval Kievan jewellery.⁴ On the fronts of the pendants are depictions of two birds with scaly plumage and wavy tails. They flank a central composition of a miniature circle and a triangle. On the backs there are isolated female crowned heads within enamelled central circles with three ornamental elements around them (Pls 4–5).

Another pair was discovered in 1876 on the Leskov estate, near the Desyatynna Church (Pl. 6). Kondakov, who was the first to describe the hoard and these *kolty* in particular, believed that they depicted female heads. The reason for his suggestion was the loose flowing hair and the shape of the crown in the form of a *kokoshnik* (female headdress), which he

thought indicated female depictions.⁵ Another scholar was more specific, suggesting that the image is a 'portrait of a famous Kievan woman of the 12th to the beginning the 13th century'.⁶

The third pair of gold and *cloisonné* enamel *kolty* with similar images was found in 1949 on Trekhsvyatytelska Street (Pl. 7).⁷ This pair is very interesting in terms of both the design and the type of construction. Each *kolt* consists of two individual disc-shaped base plates in sheet gold; the outer rims of these were cut to form rays in an arcaded pattern and covered at the ends by small hemispheres. A soldered internal gold strip holds the two base plates together. What is very uncommon is that at the tops of the *kolty* the small u-shaped gaps are not open as on other examples. In this pair the tops are covered by thin gold strips each with three holes for perfume or scented oil to escape. Each pendant is embellished with a pearl border, but in an unusual way. A fine wire is woven through the edge of the border, so that each arch originally contained a single pearl. Each central plaque with a *cloisonné* depiction is framed by an L-sectioned gold strip that is soldered in place. Two lengths of spiral wire composed of two wires twisted together encircle the frame. Between them there are five loops for a pearl border. Therefore this pair is quite luxuriously crafted and finely detailed in its use of a great number of pearls of different sizes, the best examples of which were imported to Kievan Rus' from Persia.⁸



Plate 7 Pair of gold and enamel *kolty* with crowned heads, MIKU



Plate 6 Pair of gold and enamel *kolty* with crowned heads, MIKU



In the central circle on the front of these pendants a young, attractive face is depicted on a bright blue enamelled background. The head has short, black, widening wavy hair, with curls on the forehead and eyes looking to the right. On the head there is a trapezoidal crown, with circular projections at both ends. The surface of the crown is decorated with three red vertical lines and circles of blue and red enamel, signifying precious stones. These images have been described in the literature and identified as female.⁹

Crowns of this type could probably have been worn by either males or females. Thus, on the Byzantine crown of Constantine IX Monomachos (1042–55) similar crowns are worn by the Emperor himself, his wife Zoe and her sister Theodora. However, the women's hair is bunched, pulled back and covered with a headdress.¹⁰ Bunched together hair covered with a light material can also be seen in the depiction of Desislava, the wife of Sebastokrator Kaloyan, in the fresco of the church of SS Nicholas and Panteleimon at Boyana (Bulgaria) dated to 1259.¹¹ A similar depiction of a princess with a headdress and covered hair appears on the fresco in the north-western tower of the St Sophia Cathedral, Kiev, dated to 1037.¹² It is unlikely that a woman of royal position would have worn short, flowing hair topped with a crown during that period.

The crown and hair style on the *kolty* from the hoard of

1876 find direct parallels in the depiction of Alexander the Great on an enamelled dish dated to the 1140s, which may have been an imperial gift from Byzantium to the Turkish Artukid ruler.¹³ The crown in both depictions has the same shape and is decorated in a similar way, with vertical lines in the centre and rectangles at the sides. This type of crown has close parallels in Byzantine art, representing the headdress of Byzantine Emperors. It can be seen on King Solomon, the Venetian Doge and Alexander the Great on the enamelled plaques of the Pala d'Oro, 1102–1108, and on the head of a youth, who plays a harp, on a silver-gilt Byzantine bowl of the mid- 12th century found in Chernihiv (Pl. 8).¹⁴

These images suggest that the pairs of *kolty* from the Kiev hoards of 1876 and 1949 more likely depict crowned male rather than female heads. They are most probably representations of Alexander the Great, although the placement of both images in the central circle on a background of blue enamel is usual for holy depictions. On the *kolty* of 1876 the background to the head is patterned with miniature crosses and circles in a very similar manner to that on the halo design of the Byzantine gold, silver and *cloisonné* enamel medallions from an icon frame of the late 11th to early 12th century in the collection of the Metropolitan Museum of Art.¹⁵

Referring back to the pair of *kolty* depicting a female crowned head in the Metropolitan Museum of Art (Pls 4–5), it



Plate 8 Detail of silver-gilt bowl found in Chernihiv in 1957, MIKU

must be noted that it differs from the other two pairs discussed above in both the shape of the crown (which has smooth outlines) and in the hair style. The latter is shown as wavy hair reaching only down to the ear, suggesting that it was bunched and pulled back. Thus, of all the known gold and *cloisonné* enamel *kolty* from medieval hoards found in Kiev there is only one pair which bears the image of a crowned female head, making it unique among the jeweller's art of Kievan Rus'.

The zoomorphic and foliate designs of the gold *kolty* are usually considered as local types rooted in pagan traditions and beliefs. However, many types of patterns known from Kievan Rus' jewellery can be seen perfectly expressed in Byzantine enamels of the 11th to 12th century. Thus, compositions of four lilies in a cruciform shoot (*krins*) arrangement and with petalled flowers, can be seen on the medallions and enamel plaques of the Pala d'Oro in St Mark's Basilica in Venice.¹⁶

The remains of jewellery workshops, with tools and bits of enamel, found during the excavations in the princely court on the Old Kievan Hill, provide direct evidence for native enamel production in the Rus' capital in the 11th century.¹⁷ Among the excavated items were a copper former used to make each half of a *kolt's* convex section, and a bronze template with a cut-out openwork depiction of two birds flanking a tree that was used as a model in preparing the gold sheet (see **Szmoniewski, this volume, Pl. 13**). This matrix corresponds to the depiction on one of the *kolty* in the Metropolitan Museum of Art's collection. An analogous pair of *kolty* was found near Desyatynna Church in 1876, which then entered the private collection of B. Khanenko. The find-spot supports the belief that *kolty* of this type were manufactured in a goldsmith's workshop belonging to the princely court of ancient Kiev.

Only a few temporal pendants in the *cloisonné* technique are known amongst the group of similar types of Byzantine enamelled jewellery of the late 11th or beginning of the 12th century. One example is preserved in the collection of the Metropolitan Museum of Art (**Pl. 9**).¹⁸ It consists of a hollow, crescent-shaped gold receptacle with an opening and a suspension loop. This was made from a relatively pure alloy

(88–92% gold).¹⁹ The two convex sides were soldered along the outer edges and then overlaid with a plain band of gold. The front is decorated in the centre with a haloed, beardless young male head in three-quarter profile with dark hair falling about his neck. He may represent an angel or St John the Theologian.²⁰ The image is contained within a gold circle on a field of red florets. The surrounding circular field is filled with translucent green enamels decorated with a *cloisonné* vine tendril. The central field on the back of the pendant contains an enamelled pattern of tightly interlocked red and white palmettes with accents of translucent green against a blue background. The enamel, with cloisons of varying widths, completely covers the convex surfaces of the pendant. A thin, gold stick, embellished with a pattern of crosses in *cloisonné* enamel (length 5.1cm) for inserting a cloth infused with aromatic substances into the pendant, accompanies the object. This ostentatious addition to the pendant only appears once in the collection of known temporal pendants/*kolty*.

Another such pendant, which is largely unknown to western scholars, was found during Pasternak's excavations in the city of Halych in western Ukraine in 1940.²¹ Maybe this precious item (weight 11.7g) reached Rus' as a gift from Byzantium. The two pendants are very similar to one another in their shape, patterns and technique of manufacture. The elaborate craftsmanship and minute scale of the enamelling on these objects, as well as their individual motifs, suggest that they are likely to come from a group of enamelled works produced in a highly specialised Constantinopolitan workshop of the 11th and the first half of the 12th century (**Pl. 10**).

Closely related to these temporal pendants are a collection of gold buttons/pendants in the Museum of Historical Treasures of the Ukraine in Kiev,²² and the tip of a sceptre, once in the Stoclet collection, and now in Dumbarton Oaks, Washington DC.²³ Their surfaces are divided vertically and horizontally by bands into different sections and entirely covered with *cloisonné* enamel decorated with quatrefoil crosses and a floral motif in red and blue. Some scholars consider this group of enamels to have originated in Byzantium and to be associated with the same imperial court goldsmith's workshop. They are an invaluable source for defining the differences between Byzantine and Kievan enamelled jewellery that has survived from the Byzantine period of the 11th and the first half of the 12th century.

Ross noted that the shape and the enamelling of Kievan *kolty* was derived from Constantinopolitan jewellery.²⁴ But it should be noted that the shapes of the above mentioned Byzantine pendants are not identical to those manufactured in Kiev. These temporal pendants differ from the similar type of known medieval Kievan jewellery in their size, scale and profile, the intricacy of their design and the fact that the whole surface is filled in with a variety of enamel colours, implying some differences in production.

No exact copy of a Byzantine object has been found amongst the jewellery that has been discovered in Kievan hoards. Contemporary Byzantine, as opposed to Kievan, jewellery is not clearly associated with any particular centre of manufacture or related centres. One can discern a difference only in the quality of manufacture among groups of gold jewellery with enamel, pearls, and gems.

Jewellery that derived from Kievan workshops has



Plate 9 Gold and enamel *kolt* with a beardless male bust (front) and palmettes (back), with the gold stick for inserting a cloth infused with aromatic substances into the pendant, New York, Metropolitan Museum of Art

different characteristics. None of the Kievan *kolt*y had the solid *cloisonné* enamelling that was used to decorate the entire surface of both lunette-shaped plaques, which comprised the front and back of the *kolt*. The enamels on Kievan jewellery also have a limited palette of white, red, green and blue, although some pieces contain additional colours such as yellow, black or turquoise.

Common to both Byzantine and Kievan enamels, the colours were separated by flat wires soldered to the base of the empty cavity. After layers of enamel were added, the whole piece was polished so that the enamel was not only flush with the wires but was also glossy. The result was an image intricately defined by bright colours separated by the finest of wires.

Yet Kievan enamels differ from Byzantine enamels not only in both colour and technique, but also, more importantly, in subject matter. Fine Byzantine workmanship, however, represents a crucial source of influence on the artistic culture

of Rus' and without its existence some types of ornaments may not have been created.

Kiev was as important to Rus' as Constantinople was to Byzantium. Both cities created and developed medieval jewellery fashions for the upper echelons of society. All shifts in the fashion of Rus' medieval ceremonial costume ornaments were closely connected to Kiev. Here, in the artistic centre of the state, gifted artisans, goldsmiths and enamellers were modifying old forms and creating new shapes/forms of decoration. They began to produce different variations for individual types of jewellery. For example, fashionable female ornaments, such as the similarly styled gold and *cloisonné* or nielloed silver temporal pendants, had different forms: round and smooth with a pearl border; with an inserted decorative plate and a border of cutout rays; star-shaped with filigree; with an arcaded filigree border, etc., and showed various images and decorative elements.



Plate 10 Gold and enamel *kolt* from Halych

Local goldsmiths often borrowed decorative ideas from illuminated books and church paintings. Thus, the miniatures of St John and St Mark are compositionally placed within a form of quatrefoil in the 'Ostromir Gospel' (1056–57). This type of quatrefoil is present on many Kievan gold temporal pendants as well as on ceremonial medallion chains. Likewise on the front cover of the 'Yurievsky Gospel' (1120s) one can see symmetrically positioned birds, geometric and foliate ornaments based on a three-petalled flower (*krin*). These motifs are also present in Kievan enamelled jewellery and have common features with decorative elements in the Saint Sophia Cathedral in Kiev, as well as with the richly decorated St Mark's Basilica in Venice, as noted above.

Kievan craftsmen may have fashioned their exceptional works to imitate the splendours of Byzantine art but were better able to create high-quality works of art than we might suspect. Compared to their counterparts, they were less inhibited by the canons and traditions of Byzantine art. The perfection of medieval Kievan *cloisonné* jewellery has often resulted in it being labelled 'Russo-Byzantine'.²⁵ However, in this case the term 'Byzantine' characterises the type and the level of art, but not its origin or place of manufacture. In developing a distinctive fine art and perfecting considerable technical skills, medieval Kiev created its own rich traditions in enamel and niello production. This deeply rooted cultural style can be labelled old Kievan.

Notes

- 1 V.N. Lazarev, *Mikhailovskie mozaiki*, Moscow, 1966, 15.
- 2 The word 'kolt' derives from 'kolo' (circle), the sun. Hence, the *kolt* symbolised the shining sun by its shape and golden colour. In Kievan Rus' the sun was regarded as a goddess of light. Interestingly, the word 'kolo' (meaning circle) remains in use in present-day Ukraine.
- 3 N.P. Kondakov, *Russkie klady: Issledovanie drevnostei velikokniazheskogo perioda*, St Petersburg, 1896, 198.
- 4 MMA, Department of Medieval Art and the Cloisters inv. no. 17.190.702/704
- 5 Kondakov (n. 3), 113.
- 6 V.M. Vasilenko, *Russkoe prikladnoe iskusstvo*, Moscow, 1977, 287.
- 7 I.M. Samoilovsky, 'Novyi skarb chasiv Kyivs'koi Rusi', *Arkheologiya* 6 (1952), 123–4, fig. 5.
- 8 L. Rosenthal, *Au royaume de la perle*, Paris, 1919, 33; P. Sakharov, *Skazaniya Russkogo naroda*, vol. II, part VIII, St Petersburg, 1849, 215.
- 9 Samoilovsky (n. 7), 123–4; G.F. Korzukhina, *Russkie klady IX–XIII vv*, Moscow-Leningrad, 1954, 125, no. 109; T.I. Makarova,

- Peregorodchatye emali drevney Rusi*, Moscow, 1975, 38; V.P. Darkevich, *Byzantine Secular Art in the 12th and 13th centuries*, Moscow, 1975, 270, no. 381b, 273; B.A. Rybakov, 'Drevnosti Chernigova', *Materialy i issledovaniya po arkheologii SSSR* 11 (1949), 53–8.
- 10 H.C. Evans and W.D. Wixom (eds), *The Glory of Byzantium. Art and Culture of the Middle Byzantine Era AD 843–1261*, New York, 1997, 211, fig. 145.
 - 11 *Ibid.*, 320. See also Albani, this volume.
 - 12 O. Powstenko, *The Cathedral of St Sophia in Kiev*, New York, 1954, figs 179, 180.
 - 13 Evans and Wixom (n. 10), 423, fig. 281
 - 14 I. Deer, *Die Heilige Krone Ungarns*, Vienna, 1966, pl. LXXXVII, no. 241; H.R. Hahnloser and W.F. Volbach (eds), *Il Tesoro di San Marco. La Pala d'Oro*, Firenze, 1965, no. 40, 20–1, pl. XXIII; Deer *ibid.*, pl. LXIV; A. Bank, 'Molivdovul s izobrazheniem poleta Alexandra Makedonskogo na nebo', *Trudy otdela Vostoka Ermitazha* 3 (1940), 181–93; *Museum of Historical Treasures of Ukraine*, Kiev, 2004, 160–1, fig. 122, 168, fig. 129.
 - 15 Evans and Wixom (n. 10), 347, no. 234.
 - 16 Hahnloser and Volbach (n. 14), pls LIX, LX.
 - 17 V.V. Khvoiko, *Drevnie obitateli Srednego Pridneprov'ya i ikh kul'tura doistoricheskikh vremena*, Kiev, 1913, 71–5; B.A. Rybakov, *Remeslo Drevney Rusi*, Moscow, 1948, 271–8; G.F. Korzukhina, 'Kievskie yuveliry nakanune mongol'skogo zavoevaniya', *Sovetskaya Archeologiya* 14 (1950), 217–34; M.K. Karger, *Drevniy Kiev*, Vol. 1, Moscow-Leningrad, 1958, 295–6; Ya.E. Borovsky and O.P. Kalyuk, 'Doslidzhennya Kyivs'kogo dytyntsya', in *Starodavniy Kyiv. Arkheologichni doslidzhennya 1984–1989*, Kiev, 1993, 3–42.
 - 18 Inv. no. 1990. 235a; height 2.3cm; with loop 4.9cm; depth 1.2cm.
 - 19 P.S. Griffin, 'Jewellery from Kiev', *Jewellery Studies* 6 (1993), 5–18.
 - 20 W.D. Wixom, 'Two Cloisonné Enamel Pendants: The New York Temple Pendant and the Cleveland Enkolpion', in C. Moss and K. Kiefer (eds), *Byzantine East, Latin West. Art-Historical Studies in Honor of Kurt Weitzmann*, Princeton, 1995, 659–65, figs 1–2; Evans and Wixom (n. 10), 246, no. 171.
 - 21 Y. Pasternak, *Arkheologiya Ukrainy*, Toronto, 1961, between 280 and 281; M. Fihol, *Art of old Halych*, Kiev, 1997, 146. For many years it was suggested that this *kolt* had been lost in the 1940s. However, it was in the collection of Y. Pasternak who emigrated to Canada. After his death the *kolt* was kept by his student, L. Paliy, and in 1998 she brought it back to the Ukraine. At present the *kolt* is preserved by the Historical Museum in Lviv.
 - 22 *Museum of Historical Treasures* (n. 14), 174, n. 135.
 - 23 Wixom (n. 20), 661, fig. 6; Evans and Wixom (n. 10), 249, no. 175.
 - 24 M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection. Vol. 2, Jewelry, Enamels, and Art of the Migration Period*, Washington DC, 1965, 112, nos 135, 161.
 - 25 M.C. Ross and G. Downey, 'An Emperor's Gift and Notes on Byzantine Silver Jewelry of the Middle Period', *The Journal of the Walters Art Gallery* XIX–XX (1956/7), 29–30. Some scholars have confused the term 'Russo' with the concept of Russia. The two terms Russia and Rus' cover two different historical realities (the Latin word for Rus' was Ruthenia; the name Ukraine appeared later).

A 13th-Century Jewellery Hoard from Thessalonica: A Genuine Hoard or an Art Dealer's Compilation?

Antje Bosselmann-Ruickbie

Introduction

In the early 20th century, an ensemble of Byzantine gold jewellery was purchased from an art dealer by the Greek collector Hélène Stathatos, whose collection is now kept in the National Archaeological Museum in Athens.¹ The hoard, which is described in this paper, comprised a pair of bracelets (cat. no. 1), a pair of earrings (cat. no. 2) and 14 finger-rings (cat. nos 3–16) decorated with precious stones, enamel and niello, and was said to have been found in the region of Thessalonica, Greece. The objects were supposedly found with coins of the Byzantine Emperors Isaac Angelos (1185–95) and Alexios III Comnenos (1195–1204),² thus providing a *terminus post quem* for the burial of the jewellery.

If the dealer's information was correct, the hoard contained some of the very rare key pieces for the evaluation of not only Byzantine goldsmiths' work from the 12th to the first half of the 13th century, but of jewellery in particular. However, coming from the art market, their provenance is questionable, and they have not had the attention from researchers that they deserve. Apart from their uncertain provenance another reason for this is that the catalogue of the Stathatos Collection (illustrated in black and white), in which Coche de la Ferté published the treasure in 1957,³ is rather rare today. Coche de la Ferté's studies⁴ were very thorough and are still valuable, but half a century has passed in which much new research has been undertaken and many more archaeological finds have come to light. This makes a fresh look at the jewellery necessary.

In this paper arguments will be delivered for two hypotheses: first, that the jewellery originally belonged together and actually formed a hoard as sold by the art dealer, and second, that the stylistic, iconographic, epigraphic and palaeographic evidence corresponds with the date provided by the coins. The comparative objects presented in this paper suggest that the non-homogeneous pieces of the Thessalonica hoard date to a time frame of the 12th and 13th centuries, as opposed to Coche de la Ferté's dating to the 5th to 14th centuries. However, it is problematic that most of the pieces lack Byzantine parallels; it is, therefore, essential to look for comparisons amongst other genres of Byzantine art, as well as the art of other cultures, such as Islamic or Kievan art.

In the following, the pair of bracelets, the earrings and the 14 finger-rings will each be described and then compared to other objects in order to obtain evidence for their dating.

The objects of the Thessalonica hoard

Cat. no. 1. Pair of gold bracelets with embossed clasps (Pls 1–2)

The pair of gold bracelets consists of several round wires, probably a complex loop-in-loop construction.⁵ Two heart-shaped plates⁶ connected by hinges serve as clasps. They are worked in *repoussé* and show two addorsed birds with crossed

tails flanking a tree of life.

There are no exact parallels in Byzantine jewellery for this type of bracelet. A gold bracelet in the same collection has a hoop made from two twisted wires, but has two unconnected semi-circular finials, which are decorated in relief with Christ and the Virgin Mary. This bracelet was dated tentatively to the 11th–12th centuries based on the figures general resemblances to contemporary coins.⁷ Of similar proportions to cat. no. 1, it differs in the simpler plaiting of its hoop and the shape of its finials, as well as being penannular. Two bracelets from a treasure found in Samsat, Turkey, were found with coins suggesting they could not have been buried before the middle of the 11th century.⁸ An example found in the region of Silistra in Bulgaria also has a hoop of complex plaits but much smaller drop-shaped finials that are unattached (dated to the 11th century).⁹ Other penannular bracelets are in the National Museum of Damascus, Syria: one made of a solid hoop ending in heart-shaped plaques,¹⁰ and others with plaited hoops but different clasps,¹¹ dated without corroborative evidence to the 12th–13th centuries.¹² According to these parallels, bracelets with plaited hoops can be roughly dated to the 11th–13th centuries. The type seems to have survived well into the 14th century in the Balkans, with rounded or spatula-shaped finials decorated with large granules.¹³

Further clues can be gained from analysing the heart shape of the embossed plates. This motif was probably derived from ivy leaves and was used in enamelled depictions of garments from the 11th century onwards, as on the famous 'Monomachos Crown' in Budapest (1042–50).¹⁴ In his work on the so-called 'Artukid Bowl'¹⁵ in Innsbruck, Steppan classified the motif as both a 'courtly ornament' and a 'stylistic criterion of courtly enamels'.¹⁶ In architecture, the heart appears as a filler for pendentives between arches from the 12th century onwards, and possibly as early as the 11th century.¹⁷ However, the precise origin of the motif is uncertain. Ousterhout assumed that despite its imprecise shape it was probably a heraldic symbol of the Comnenian dynasty, beginning with the introduction of chivalric practices under Manuel Comnenos (1143–80).¹⁸ Ousterhout's conclusion was that a 12th-century date would correspond with the earliest appearance of the heart as an independent design motif.¹⁹ Therefore, as the heart shape is an integral design element of our bracelets, a date before the 12th century seems rather unlikely.

This dating is corroborated by the iconography: the addorsed birds flanking a tree of life appear in Islamic, Kievan, western Medieval, as well as Byzantine art in the 12th to 13th centuries. The majority of the comparative pieces, discussed below, cannot be dated with precision, but do at least hint at a likely time frame. Those drawn from Kievan art can at least be dated on historical grounds to before the early 13th century when the Tatar invasions of the 1230s marked the end of Rus'.

Addorsed birds appear on Islamic textiles, ceramics and metalwork from the 12th century at the latest.²⁰ Almond-shaped amulets made in bronze and gold, probably from Anatolia or Iran, and dated to the 12th to 13th centuries²¹ serve as examples of medieval mass-production, repeating a then well-known motif which saw variations in Islamic art in the form of addorsed harpies and sphinxes.²² A late example is a tile from Kashan, Iran, in the British Museum, dated to around 1300.²³ In Kievan Rus' the motif of addorsed birds, as well as sirens, also enjoyed great popularity, for example on enamelled temple pendants,²⁴ though often without the crossed tails or the tree of life in the centre. The motif also appears in other genres of Kievan art, such as ceramics, metalworking and fresco painting.²⁵ A 12th-century bowl that might have been a Byzantine import even combines addorsed griffins, sirens and lions. It was found in Tchernigov and was probably buried in 1239 during the Tatar attack on the city.²⁶ How widespread the general motif of addorsed animals was in the arts of the 12th and 13th centuries all over Europe and the East, is proven by examples from Britain, such as a harness plaque with similarly addorsed lions from Salisbury which dates to the late 12th or 13th century.²⁷ Regarding this plaque, Stratford stated that 'heraldic compositions with two animals or birds flanking a central tree were common currency in the 12th century through their popular dissemination on textiles....'²⁸

However, the best – and datable – comparison is found in the Byzantine capital itself, in the Pantocrator monastery in Constantinople, which was an imperial building of the Comnenian dynasty and their burial place. Addorsed birds decorate the cornice of the north church's dome (Pl. 34).²⁹ The north church belongs to the earliest building phase of the monastery commissioned by Emperor John II Comnenos (1118–43) and his wife Eirene (d. 1124). The north and the south church were erected between 1118 and 1136 (date of the *typicon*).³⁰ The birds on the cornice are very similar to the birds on the Stathatos bracelets³¹ and show that the motif was in the iconographic repertoire of Byzantine craftsmen in the capital. Later, addorsed birds grouped around a tree of life appear in the church of Christ Antiphonitis in Kalogrea in Cyprus (east of Kyrenia). The frescoes are dated to the end of the 12th century (c. 1190) and reflect the Comnenian style of the capital.³² Interestingly, they are surrounded by a beaded circle as well as a row of small trapezoids, motifs reminiscent of the ornamental bands on cat. nos 5–7.

Given the date of the initial appearance of the motif one can assume that the Stathatos bracelets were produced some time in the 12th–13th centuries. However, the addorsed birds in the Pantocrator monastery, with its imperial background, seem to be the best clue for dating the Stathatos bracelets.



Plate 34 Cornice of the north church's dome, Pantocrator Monastery, 1118–36, Constantinople

The monetary value of the jewellery was clearly substantial and suggests that the hoard probably belonged to a member of the nobility or to a courtier. Given the loss of territory and the contraction of the economy in the Middle and Late Byzantine periods, it seems probable that precious metals were rarer and more valuable than in the preceding Early Byzantine period. To gain an idea of the value of gold, the jewellery and diadem plaques from the 10th-century Preslav Treasure can serve as an example.

These objects most likely formed a diplomatic gift from the Byzantine emperor to the Bulgarian tzar.³³ They weighed c. 640g, the equivalent of two Byzantine *litra* (one pound – *litra* – equals c. 319–320g).³⁴ According to the 10th-century *Book of the Eparch* (probably finished in 912) that sets out the rules and regulations for the office of the eparch of Constantinople,³⁵ a large building was worth more than one pound of gold.³⁶ The Stathatos bracelets weigh 81.1g and 83.2g respectively, representing almost precisely half a Byzantine *litra*. The time difference – at least 200 years later than the *Book of the Eparch* – makes it difficult to judge whether the relationship, however imprecise, between one pound of gold and a large building was still valid. It is difficult to judge how much the pair of bracelets were worth, but Morrisson and Cheynet's study of the sources gives us some idea. In 1143, for example, a lamp for the Holy Sepulchre weighing 20 gold pounds had the price of 1440 *hyperpyra*.³⁷ Taking this roughly contemporary information as a basis for valuing the Stathatos bracelets, it can be estimated that their cost would have been approximately 36 *hyperpyra*. A year before, in 1142, a vineyard in Macedonia was sold for 17 *hyperpyra*.³⁸ Another source dated to 1155/6 states that ten cows were sold for one *nomisma*³⁹ (between 1092 and 1204 one *hyperpyron* equalled 4/5 *nomisma*⁴⁰). In the late 12th century a pair of oxen was priced at seven *hyperpyra*.⁴¹ These price comparisons only provide a hint as to how much the gold bracelets were worth, but they show that they were surely far beyond the spending capacity of an average person.

The comparisons mentioned above suggest that the prototypes of the motifs employed on the bracelets are possibly to be sought in imperial contexts such as the Pantocrator monastery, and that the heart shape might well be interpreted as a heraldic symbol if Ousterhout's argument is accepted.⁴² A 12th-century date for the Stathatos bracelets seems plausible on these grounds, although a 13th-century date cannot be excluded judging from the iconographic parallels.

Cat. no. 2. Pair of gold earrings with animal finials (Pls 3–5)

The earrings, one of which is incomplete, consist of hollow openwork hoops ending in unidentifiable animal heads (mythical beasts?). Their eyes and ears are inlaid with round garnet (or red glass) cabochons and almond-shaped turquoise glass respectively.⁴³ The two rings in the mouths of the animals held lost loops. The earrings would probably have been originally decorated with rows of pearls on wires held by small gold rings on the outside.

Jewellery with animal-head terminals is well known, not only in the Bronze Age and the Greek and Roman periods, but also in the Middle Ages in both western and Scandinavian art.⁴⁴ Animal-head terminals, however, appear rarely on medieval earrings and therefore it is difficult to determine the prototypes for our pair. The round eyes and drop-shaped ears

on an animal head appear, for example, on a bracelet inlaid with garnet found in a Merovingian grave in France dated to around 500.⁴⁵ However, there are no close *comparanda* for the earrings in Byzantine jewellery. Animal finials appear on simple Middle Byzantine bronze bracelets from Bulgaria and northern Greece,⁴⁶ but not frequently on earrings. The best comparison is a 12th- to 13th-century silver earring from a burial in Ohrid, although it has a plainer design.⁴⁷

Again we have to look to other areas for comparative pieces. A bracelet finial from 12th-century Kievan Rus' is very close with regard to the proportion and overall design of the animal head.⁴⁸ A pair of bracelets from Persia, dated to the 11th to 12th centuries, provide a particularly close parallel, as they incorporate not only the animal heads, but also inlaid stones.⁴⁹ On the Islamic bracelets these are of turquoise, whilst the Stathatos pieces are only decorated with glass inlays of the same colour. Middle Byzantine jewellery is never embellished with genuine turquoise,⁵⁰ although the colour was often copied in glass, particularly in enamel. Two other features point to Islamic prototypes for the Stathatos earrings: not only are the hoops pierced,⁵¹ but the resulting holes are surrounded by what seems to be an imitation of beaded wire or linear granulation. This surface treatment is unique for Middle Byzantine jewellery. It seems as if a particular filigree wire technique, typical of Fatimid goldsmiths' works, may have been imitated. A Fatimid earring in the Benaki Museum, Athens,⁵² shows how this characteristic Fatimid filigree was made: two twisted wires were bent to form scrolls, whilst rows of granules, looking like beaded wire, were placed in the grooves between the wire. The back was then stabilised by strips of sheet gold. Perhaps this pierced surface appearance, with raised parts with a granulated surface, served as the general prototype.

This comparison with Islamic filigree, albeit hypothetical, as well as the comparison with the Kievan and Islamic bracelets with animal finials, suggest a date for the Stathatos earrings of not before the 11th century, and probably rather later than that. The dating to the 10th–11th centuries suggested by Coche de la Ferté⁵³ is not impossible, but seems rather too early.

Finger-rings (Pls 6–31)

The finger-rings of the Thessalonica hoard are equally difficult to classify and date because they again lack parallels within the corpus of Byzantine jewellery. A total of 14 rings can be sorted into four discrete groups:

1. Six cast gold rings, of which four form two groups (cat. nos 3–8).
2. Four gold rings with thin hoops and set with stones (cat. nos 9–12).
3. Three hollow gold rings engraved or decorated with niello (cat. nos 13–15).
4. A small ring, the hoop decorated with a pair of hands (cat. no. 16).

GROUP I (Pls 6–17)

The six gold rings of Group I (cat. nos 3–8) share a common feature in that they are all hollow-cast. They differ, however, in their decoration: one ring has a monogram on the bezel and plain shoulders (Pl. 6), one is nielloed (Pls 7–8), and the other four are enamelled (*Grubenschmelz*) (Pls 9–16). Nevertheless their proportions and method of production suggests that they



Plate 35 Gold ring with monogram, (first half of?) 13th century, London, British Museum

come from the same workshop. There are hardly any Byzantine parallels for these rings.

The plainest ring of Group I (Pl. 6; cat. no. 3) has an engraved monogram that was dated by Coche de la Ferté to the 5th to 8th centuries,⁵⁴ and which subsequently led him to believe that it was the oldest piece within the hoard. However, Seibt, on the basis of the letter shapes, in particular the alpha and omega, has recently dated it to the end of the 12th or the 13th century, probably to around the mid-13th century at the latest.⁵⁵ This dating is in agreement with the coins supposedly found together with the hoard.

The second ring (Pls 7–8; cat. no. 4) has an octagonal bezel with concave sides. The bezel is engraved with a head enclosed by nielloed decoration which is continued on the shoulders and sides. This piece has a close parallel in a ring in the British Museum with an engraved Greek monogram on its bezel (Pl. 35),⁵⁶ thus proving its Byzantine provenance. This ring has been dated to the Late Byzantine period based on its monogram, of which different readings have been offered: Dalton read the name as that of the Byzantine Emperor Manuel II Palaiologos (1348–1425)⁵⁷, but Entwistle considered this unlikely and dated the ring more generally to the 13th to 15th centuries.⁵⁸ Zaleskaya suggested reading the name as that of Manuel Kantakouzenos (reigned 1349–80) and an attribution to the Despotate of Morea, perhaps Mistra.⁵⁹ However, Seibt has convincingly dated the British Museum ring on the basis of epigraphic parallels to the 13th century, possibly the first half.⁶⁰ Because of the striking similarities between this ring and cat. no. 4 it can be assumed that they came from the same workshop and should be dated to the same period.

Unlike the first two rings, which are singletons, the remaining four enamelled rings form two groups (cat. nos 5–8). Two have square bezels (cat. nos 5, 6), the other two lozenge-shaped bezels (cat. nos 7, 8). Even though they have the same general shape and shoulder decoration in common, they bear different designs: the bezels show respectively two standing figures (Pls 9–10), a lion (Pls 11–12), a two-bodied mythical creature with one head (Pls 13–14) and an abbreviated scene known as the *Ascent of Alexander* (Pls 15–16).

The profiles of the latter two rings are unique amongst Byzantine jewellery. However, the rings with square bezels can be paralleled on a Byzantine ceramic dish from Corinth, probably dating from around the middle of the 12th century (1130–60; Pl. 36).⁶¹ The ring held in the beak of a bird on this plate looks similar to cat. nos 5 and 6, differing only in the more exaggerated flaring terminals.⁶² However, for further comparisons one is forced again to look outside the boundaries of the Byzantine Empire. The two rings with square bezels (cat. nos 5, 6) can be widely compared to some Islamic rings with regards to their shape, although these are made in filigree.⁶³ One of these Islamic rings even has a similar bezel design to cat. no. 5 of two standing figures (Pl. 37). The ring in the



Plate 36 Byzantine ceramic from Corinth, first half of 12th century (1130–60)

Benaki Museum in Athens was probably produced in '12th-century Iran'.⁶⁴ Apart from these Islamic comparisons, a Byzantine bronze ring in the Dumbarton Oaks Collection, which was dated to the 13th century on the basis of a comparison with the Stathatos ring, is engraved with two similar figures;⁶⁵ it differs, however, in the hexagonal shape of its bezel.

Interpreting the two figures on cat. no. 5 is difficult as they lack identifying inscriptions and are not nimbed. One is dressed like a soldier, the other like a civilian.⁶⁶ Paired saints, such as Sergios and Bacchos or Theodore and Demetrios, often appear in Byzantine art.⁶⁷ However, they are usually both depicted in military attire, whereas the figures on the Stathatos ring are not. Coche de la Ferté suggested they were St Nicholas and St Demetrios on the grounds of comparisons with lead seals from the 11th to 12th centuries:⁶⁸ a seal of Georgios, bishop of Phtia in Thessaly, shows the same arrangement of figures, but the accompanying inscriptions are unfortunately almost illegible; a further seal of the *curoplates* John Triakontaphyllos shows two figures and has complete inscriptions naming St Nicholas and St Demetrios.⁶⁹ Assuming that these two saints are the figures actually depicted on the Stathatos ring, this would fit well with a supposed find-spot for the hoard in the region of Thessalonica. The city was an important port with at least five churches dedicated to St Nicholas, the patron saint of sailors. St Demetrios was the patron saint of Thessalonica whose relics were kept in the Church of St Demetrios. However, this interpretation cannot be proven due to the lack of identifying inscriptions.

Some clues for dating the Group 1 rings can be elicited from the double-bodied creature, probably a lion, on one of the rings with a lozenge-shaped bezel (cat. no. 7). Double-bodied

sphinxes and harpies appear, *inter alia*, on stone reliefs from Persia (probably early 13th century),⁷⁰ on a bronze mirror from Persia or Asia Minor (13th century),⁷¹ and on a bronze bowl from east Persia, dated to the end of the 12th century.⁷² The double-bodied lion can be found especially in Saljūq art, for example on stucco reliefs. Baer has argued that they were guards of the royal palaces and had an apotropaic function.⁷³

Although many of the comparative pieces are derived from Islamic art, the best parallel for the ring with the lion (cat. no. 6) is a ring purchased in Austria as 'coming from the Balkans?' (Pl. 38). Lacking an archaeological context it has been dated on stylistic grounds to the second half of the 12th century.⁷⁴ The Austrian ring is made from silver, but the engraved depiction of the lion with its S-shaped tail, the raised front paw, the turning of the head and the same degree of stylisation are all comparable to the Stathatos ring. Apart from this, the nielloed decoration found on the silver ring matches the designs on some of the rings of our Group 2, with a triangular pattern around the raised bezel (cat. nos 9, 11) which will be discussed below. The motif of the lion as such should not be relied upon as a dating tool, particularly as the Austrian ring is not dated reliably. Nevertheless it is worth pointing out that similar depictions of lions with S-shaped tails and raised paws appear, for example, in relief on a finger-ring in the Victoria & Albert Museum (Sicily, 12th century)⁷⁵ or as ornaments on Romanesque book-bindings from London and Durham dated to c. 1170–80 and c. 1185 respectively,⁷⁶ parallels which support the dating of the ring from Austria.

Cat. no. 8 bears a depiction of a scene known as the *Ascent of Alexander*. As this is the only narrative scene found on Middle Byzantine jewellery, the ring is of great interest. In this case the scene is reduced to the essential elements: the ruler sits on a folding chair, indicated by two crossed lines, referring to the *sella curulis* of the Roman magistrates. The chair is flanked by two animals. Alexander the Great (d. 323 BC) was in his lifetime a famous military leader. After his death he became a role model for succeeding rulers because of his conquests and military strength. Between the 3rd century BC and the 3rd century AD the myths and legends surrounding Alexander were set down in a text known as the *Alexander Romance*, with a first Latin translation in 330.⁷⁷ The text was popular in the Middle Ages and was translated into many languages. It is preserved in 18 manuscripts from the 11th to 16th centuries.⁷⁸

The *Ascent of Alexander* is a common subject in Byzantine art.⁷⁹ The scene, mostly with griffins, or rarely, eagles drawing the chariot, appears throughout western Medieval and Middle Byzantine art, on textiles, stone reliefs and metalwork,⁸⁰ hence the motif itself cannot be used for dating. Depictions of the scene appear on three Middle Byzantine goldsmiths' works,



Plate 37 Gold ring with filigree and granulation, Persian, 13th century (?), Athens, Benaki Museum



Plate 38 Silver ring with niello inlays, purchased in Austria (perhaps found in the Balkans), second half of 12th century, Haedeke Collection, Germany

which pre-date the preserved manuscripts: on a diadem plaque from the Preslav Treasure (probably 927),⁸¹ a gold ring in the Dumbarton Oaks Collection (11th century)⁸² and the so-called 'Artukid Bowl' in Innsbruck, Austria, dating from the 12th century.⁸³ These examples show Alexander's chariot drawn by griffins as described in the *Alexander Romance*, while the animals on the Stathatos ring flanking Alexander's chair seem to be a mixture of griffins and eagles.⁸⁴ These objects are made from gold, most of them with enamel. They seem to belong to an imperial context as the diadem plaque from the Preslav Treasure⁸⁵ formed the centre of a diadem that was probably part of a gift from the Byzantine emperor to the Bulgarian Tzar. That the *Ascent of Alexander* is part of the vocabulary of imperial iconography has been emphasised by Steppan in his studies on the 'Artukid Bowl'.⁸⁶ The former owner of the Stathatos ring should, therefore, be sought in the nobility or courtly circles.

Further clues for dating can be obtained from comparative decorative ornament. Although ornament in general is not considered to be a reliable indicator for dating, as Restle has recently reiterated, some forms and types of ornament seem to have been 'common currency' in the 12th to 13th century.⁸⁷ The row of circles around the bezels of two of the rings with square bezels (cat. nos 5, 6) can be found in book illuminations from the 11th to 13th centuries,⁸⁸ and on metalwork as exemplified by a 12th-century copper plaque with St George.⁸⁹ The early 13th-century mosaic floor of the Church of St John in Ravenna – 'son style est dû à l'influence byzantine consécutive aux Croisades'⁹⁰ – also shows that this ornament was fashionable in this period over a large area.⁹¹

Another framing motif is the angular meander along the edge of the bezel which encloses the *Ascent of Alexander* (cat. no. 8). A similar band appears on an enkolpion in Sofia, Bulgaria, dated to the 12th century.⁹² In both cases, the same technique – *Grubenschmelz* – and colours were used: green, red and blue.

In summary we can say that the six rings of Group 1 probably come from one workshop, which also probably produced the example in the British Museum. The date of its monogram, 13th century, perhaps the first half of the 13th century, and the date of the monogram on the gold ring cat. no. 3, late 12th to 13th centuries (probably around the middle of the 13th century at the latest), provide some evidence for the dating of the whole group. The comparative objects discussed above do not argue against this time frame. On the basis of the Greek monograms on cat. no. 3 and the British Museum ring we can assume that the whole of Group 1 is of Byzantine origin.



Plate 39 Gold ring with cut down and re-used Middle Byzantine jasper seal depiction of St Theodore, London, Victoria & Albert Museum

GROUP 2 (Pls 17–23)

Although the rings from Group 1 seem to be Byzantine because of their Greek monograms, most of the comparative objects for Group 2 (cat. nos 9–12) are drawn from western Medieval art. Their common feature is a thin round gold hoop and a bezel in the shape of a *frustrum*, a truncated cone or an octagon made of sheet gold and stabilised with a filler. The bezel profiles vary from round to rectangular and octagonal. The four rings are set respectively with a ruby (or tourmaline), an amethyst (or ruby), an antique carnelian gem⁹³ and a glass paste. Three of the four have niello decoration on their bezels.

Rings with *frustrum*-shaped bezels are a common Gothic type that appears in the first half of the 12th century and can be found in the West until the middle of the 13th century.⁹⁴ The only slightly similar ring found in the Byzantine Empire that I know of is a bronze ring from Corinth that was dated to the 11th century on the grounds of its archaeological context, although it might be rather later.⁹⁵ The Corinth ring differs from the Stathatos rings in material, proportions and in the shape of the bezel. A better parallel is a gold ring in the Victoria & Albert Museum (Pl. 39),⁹⁶ which is set with a jasper depicting St Theodore,⁹⁷ and which appears at first glance to account for the appearance of this ring shape in Byzantium.⁹⁸ However, according to Spier,⁹⁹ this particular Middle Byzantine gem was a Middle Byzantine seal that was later cut down, and hence is used as a *spolia* in the gold ring. Therefore, it could have been set in the gold ring either in Byzantium or the West.

The majority of comparative rings come from England, France and Germany. Some of the rare dated pieces formed part of the Lark Hill hoard from Worcester, which was buried probably in 1173/4 (Pl. 40).¹⁰⁰ It consists of seven finger-rings,



Plate 40 Rings from the Lark Hill hoard, Worcester, probably buried 1173/4, London, British Museum

six made from silver, one from bronze, 208 English coins from the reign of Henry II (1154–89), struck between 1158 and c. 1170, as well as 21 foreign coins, most of them from France.¹⁰¹ Even though the hoops of the Lark Hill rings are flat, they share the truncated bezels and similar proportions with the Stathatos rings, as well as the band of engraved bars at the junction of hoop and bezel.

These features also appear on a number of other similar rings datable on the basis of their archaeological context: the earliest datable example has been ascribed to the Bishop of Durham, Ranulf Flambard (1099–1128);¹⁰² two gold rings with square truncated bezels set with a small ruby (from Belgium, province of Hasselt, first half of 12th century)¹⁰³ are similar in proportion to cat. no. 11; a ring with rectangular bezel and a sapphire from the grave of Alberio of Montreuil, Archbishop of Trier, Germany (1131–52);¹⁰⁴ a ring again with similar proportions to cat. no. 11, but engraved with a flower motif, from the grave of Arnold I of Walencourt, bishop of Trier (1169–83);¹⁰⁵ and finally, a ring set with a green plasma cabochon from the grave of Hubert Walter, Archbishop of Canterbury (d. 1205).¹⁰⁶ A square gold ring set with amber from a grave in the St Petri Cathedral in Bremen and which can probably be dated to the second half of the 12th century¹⁰⁷ is similar to cat. no. 10, although it has semi-circular openings at the bottom of the truncated bezel and a decorated hoop. A round ring with an undecorated oval bezel similar to cat. no. 9 comes from a grave in the same Cathedral and was dated to around 1200.¹⁰⁸ These parallels all point to a 12th- or early 13th-century date for this ring type.

The majority of the comparative objects of the 12th and 13th centuries cannot unfortunately be dated with greater precision. For example a gold ring in Pforzheim, Germany, resembling the smallest of the Stathatos rings of Group 2 (cat. no. 11), although without the nielloed decoration, was dated to the 13th century and labelled 'French' without explanation.¹⁰⁹ A bronze ring set with an almandine (garnet), dated to the 12th century,¹¹⁰ has a flat hoop like the rings in the Lark Hill hoard but has a similar square truncated setting to cat. no. 10, as well as the characteristic small bar between hoop and bezel. A similar gold ring with a round hoop in a private collection was dated to the 12th century.¹¹¹ Another gold ring, dated to the middle of the 13th century,¹¹² has an oval bezel comparable to cat. no. 9, which is, however, decorated with petals. It also has the characteristic bar and, like cat. no. 9, a re-used Roman gem.¹¹³

Three other silver rings in a private collection in Germany¹¹⁴ have the same typical truncated bezels, but differ in having hoops of D-shaped cross-section. Set in one of them is a square metal plate (instead of a stone) engraved with a lion (**Pl. 38**). This ring, mentioned above in the context of its iconography, was purchased in Austria and probably comes from the Balkans.¹¹⁵ It is comparable to the Stathatos rings in more than one respect, and it is therefore even more regrettable that the piece does not have a datable archaeological context. As already mentioned it has nielloed decoration in the form of triangles that is comparable to cat. nos 9 and 11.¹¹⁶ Furthermore, it creates a connection between the otherwise very different ring Groups 1 and 2, by first having a flat metal bezel which is characteristic for Group 1 and second, by showing a lion that is very similar to the lion on cat. no. 6 also of Group 1. A third



Plate 41 Silver ring with rock crystal and animal heads on the shoulders, found in Norfolk, 12th century, Haedeke Collection, Germany

silver ring from the already mentioned private collection in Germany again combines features of our ring Group 2 with other objects in the Thessalonica treasure: the silver ring with a rock crystal, found in Norfolk and dated to the 12th century, has a hoop that ends in animal heads on both sides (**Pl. 41**).¹¹⁷ This feature is comparable to the earring terminals of cat. no. 2.

The chronological framework for rings with truncated stone settings is corroborated by rings from an entirely different geographical and political area: Kievan jewellery of the 12th to early 13th centuries proves that conical settings were common there as well. A temple pendant with stones set in octagonal settings with concave sides (probably 12th century)¹¹⁸ resembles cat. no. 12. Very similar settings are also found on three enamelled medallions from a necklace (probably 12th to early 13th century).¹¹⁹ A Kievan ring from the early 13th century even shows similar niello decoration to some of the Stathatos rings (cat. nos 9, 11, 12).¹²⁰

To summarise one can say that the general shape of the rings in Group 2, and in particular the shape of the settings, as well as the niello decoration, appears in the 12th and early 13th centuries in a wide area from France to Kiev, and it remains unclear whether the Stathatos rings were imported or produced locally. However, looking at the lion ring purchased in Austria (**Pl. 38**), which combines features of ring Groups 1 and 2, as well as the ring from Norfolk (**Pl. 41**), which combines features of ring Group 2 and the earrings with animal-head terminals, it is possible that they might have been produced locally. It remains to state that the general ring shape is not typical for Middle or Late Byzantine jewellery. At this time in Byzantium, a rather massive ring shape with the bezel emerging from a broadening hoop was preferred.¹²¹

GROUP 3 (Pls 24–29)

This group shares the typological features of a hollow bezel and hoop, with the bezel and shoulders decorated with niello (cat. nos 13–15). Between the bezel and the hoop is a raised and engraved moulding. The rings have either a rectangular or hexagonal bezel or a hexagonal bezel with concave sides.

Again, close Byzantine parallels are almost entirely lacking. A gold ring in a private collection similar to cat. nos 14 and 15, but much less carefully executed, might come from Bulgaria and is dated to the 13th–14th century.¹²² It shares the features of a hexagonal bezel, the underside of which has an alternating concave and convex profile, and a similarly decorated bezel with a central rectangular element with flared

ends flanked by two drop-shaped elements, each containing four crosses.

One of the Group 3 rings has a Latin inscription (cat. no. 14), so it is not surprising that some of the most convincing parallels, at least for some of the details, are found in the West. Analogous features appear on a ring in the Louvre, which is, however, set with a stone. It was found in a church in Paris and dated to the 12th–13th century.¹²³ The elongated leaves on the corners of its bezel are particularly close to cat. nos 13–15. The engraved and nielloed decoration of another ring in the Louvre is also comparable with regards to the leaf-decoration on its underside (and also to the shoulder decoration of cat. nos 5 and 6). This piece of jewellery was very likely one of the pieces found in Notre Dame in Paris in the 19th century. It was dated for stylistic reasons to the second half of the 12th century (last quarter?) and probably belonged to the bishop of Paris, Eudes de Sully (1197–1208).¹²⁴ Similar leaves on the corner also appear on a ring that has already been mentioned as a comparison for ring Group 2 as it has a truncated bezel, namely the ring of Bishop Arnold I of Walencourt (1169–83).¹²⁵

Some of the features of Group 3 can again be found on Kievan jewellery, like the moulding on the shoulders of the hoop, which appears in a slightly different fashion on two Kievan silver rings in the British Museum. They belong to a hoard that was probably buried in the 1230s due to the threat of the Tatar invasion.¹²⁶ Coche de la Ferté also mentions parallels for the ring with the hexagonal bezel (cat. no. 15) from Kievan Rus', which were found together with Comnenian coins.¹²⁷ He assumed that the rings were Byzantine and copied in Kievan Rus', as well as in the West.¹²⁸ Perhaps cat. no. 14 with its Latin name was such an imitation?¹²⁹

Again, the decoration supports a date range of the 12th–13th centuries: the scrolls and palmettes with the rather pointed leaves, especially on cat. no. 15, appear, for example, on a ceramic plate from Corinth (late 12th–early 13th century),¹³⁰ a plate fragment from Thebes (second half of the 12th century)¹³¹ and a plate from Iran (12th century).¹³² Similar pointed leaves are also found on jewellery and book illuminations of the 12th and 13th centuries.¹³³ A very close and dated comparative piece is the head reliquary of St Oswald, made in Lower Saxony, Germany, probably in Goslar, which has similar nielloed scrolls to the Stathatos ring. It can be dated to 1185–89 on the basis of its inscription.¹³⁴

Group 3 is very difficult to evaluate, but none of the comparative objects cited above argue against a date in the 12th to 13th centuries. Although most of the comparanda quoted come from the West, certain features like the pointed scrolls or the moulding on the shoulders of the hoops can be found in the Byzantine Empire as well Kievan Rus'. Therefore, it is again difficult to decide on the provenance of Group 3. They might well, like Group 2, have been produced locally.

GROUP 4 (Pls 30–31)

The last group consists of only one piece: a small gold ring with a ruby or tourmaline cabochon (cat. no. 16). Its most striking feature is a hand on each side of the hoop. This is unfortunately no criterion for dating, for rings with hands can be found from Antiquity to modern times, especially in western Medieval, as well as Renaissance art. They are often seen as wedding, engagement or love rings.¹³⁵ One of the very few datable

medieval examples comes from the Lark Hill hoard, probably buried in 1173/4 (Pl. 40).¹³⁶ However, these examples all show conjoined hands whilst the Stathatos ring displays only one hand on each side.

The general ring shape is more revealing: it resembles the type of stirrup-shaped ring that enjoyed popularity from the 11th to 14th century,¹³⁷ especially in the 12th–13th century in England, but also in France and Germany, and is preserved in many examples.¹³⁸ The earliest seem to suggest a first appearance of this ring type around the middle of the 11th century: a gold ring set with an amethyst from a grave in the St Petri Cathedral, Bremen, Germany, can probably be ascribed to Archbishop Bezelin Alebrand of Bremen (d. 1043).¹³⁹ A fixed date is provided by a depiction of a stirrup-shaped ring in the inventory of St Albans Abbey (*Liber additamentorum*). This ring is dated by the initials of the donor Richard, who received it from Eleanor of Aquitaine, so it must have been in existence around 1140.¹⁴⁰ The earliest English ring comes from the grave of bishop Hilary of Chichester who died in 1169.¹⁴¹ A large gold ring set with a sapphire found at Wittersham in Kent represents the largest example of this type; it is dated to c. 1200 and is now in the British Museum.¹⁴²

The small stirrup-shaped ring from the Thessalonica hoard would, therefore, have been made between the middle of the 11th and the 14th century, probably sometime in the 12th or 13th century. The question must be raised as to whether it was an imported piece or made locally. Given the lack of Byzantine comparanda, an import seems more likely.

Dating, find-spot and ownership

In summary one can say that the only object of the Thessalonica hoard with internal evidence for its dating is the gold ring (cat. no. 3) bearing a cruciform monogram of the end of the 12th to 13th century – probably the middle of the 13th century at the latest. The rest can only be evaluated on the basis of comparisons with other objects. As we have seen these date from the 11th to the 14th century, with most dated for various (and admittedly not always reliable) reasons to the 12th and (early) 13th century. However, datable pieces like the British Museum's monogram ring (13th century, probably first half) support the chronology provided by the monogram ring from the Thessalonica hoard.

This correlates with the coins, the latest of which was minted during the reign of Alexios III Comnenos (1195–1204). Therefore, one can assume that the jewellery was buried after 1195. The dating of the two monogram rings makes it likely that the jewellery was buried at some time in the first half of the 13th century.

The first half of the 13th century was a turbulent time for the region of Thessalonica and provides some dates at which the hoard could have been buried.¹⁴³ In 1204 Thessalonica was taken by Boniface of Montferrat during the Fourth Crusade. His rule lasted only until 1207 when he died in an ambush by the Bulgarian Tzar Kaloyan. Thessalonica, however, stayed under changing Frankish rule until 1224.¹⁴⁴

Perhaps the treasure was hidden in 1224 when Thessalonica was captured by Theodore Comnenos Doukas, or in 1246, when it was reincorporated into the Byzantine Empire by John III Doukas Vatatzes. After this date there is no suitable historical occasion for burying such a valuable treasure because

Thessalonica remained under Byzantine control.¹⁴⁵ None of the pieces of jewellery or the comparative objects argue against this dating.

Of course, the dealer's information that the hoard was found in the region of Thessalonica cannot be taken at face value. However, assuming that the jewellery once belonged to a member of the Frankish Crusaders who ruled over Thessalonica from 1204 to 1224, this would solve some of the problems of the heterogeneity of the treasure - the rings mostly show signs of wear and cannot have formed part of a goldsmith's stock for sale.

Therefore, the most likely date for the burial of the Thessalonica treasure is 1224, even though 1246 cannot be excluded. Some pieces could have been made in Thessalonica, such as the finger-rings of the clearly Byzantine Group 1, and also perhaps the finger-ring Groups 2 and 3, whilst others might have been imported such as the stirrup-shaped ring decorated with hands (Group 4).

Conclusion: a genuine hoard

The evidence discussed above supports the interpretation of the Thessalonica jewellery as a genuine hoard. It seems highly unlikely that a dealer more than half a century ago would have managed to compile such a convincing hoard from different sources given the then state of research and available objects for comparison, such as the monogram ring (cat. no. 3), dated by the first researcher of the hoard to the 5th–8th centuries, and which has just recently been re-dated to the 12th to middle of the 13th century. The Thessalonica hoard still leaves many questions open, such as the identity of the former owner of the jewellery (P. Susen?), but in the meantime it represents the only reliable and dated Byzantine gold jewellery hoard of the period between the 11th and 15th centuries and is hence an invaluable source for the evaluation of high-status Byzantine goldsmiths' work and Byzantine art in general.

Catalogue

1. Pair of gold bracelets with heart-shaped clasps (Pls 1–2)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ504a/b.

Gold; hammered sheet gold, *repoussé*, punched, chased, granulation, probably drawn wire.

Measurements: 1a: 8.1 x 6.8cm, Wt 81.1g; 1b: 8.2 x 6.7cm, Wt 83.2g.

Published: Coche de la Ferté 1957 (n. 2), nos 14, 15; Bosselmann-Ruickbie (n. 95), cat. no. 116.



Plate 1 Cat. no. 1b (left) and 1a (right)

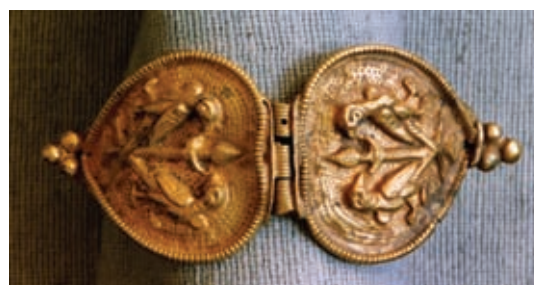


Plate 2 Cat. no. 1a

2. Pair of gold earrings with animal finials (Pls 3–5)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 494.

Gold, turquoise coloured glass, red glass (or garnet); pierced and engraved.

Measurements: 2a: W. 5.5 x 5.0cm, Wt 25.4g; 2b: W. of preserved part 2.0 x 4.9cm, Wt (today) 23.3g.

Published: Coche de la Ferté 1957 (n. 2), nos 16, 17; Bosselmann-Ruickbie (n. 95), cat. no. 73.



Plate 3 Cat. no. 2a



Plate 4 Cat. no. 2a, detail of finial



Plate 5 Cat. no. 2a, detail of finial

3. Gold finger-ring (Pl. 6)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ646. Gold; cast, engraved, punched. Measurements: 2.13 x 2.30cm, Wt 4.4g. Monogram (Greek, inverted): ΙΩΑΝΝΗ ('of John').

Published: Coche de la Ferté 1957 (n. 2), no. 31; Bosselmann-Ruickbie (n. 95), cat. no. 138.



Plate 6 Cat. no. 3

4. Gold finger-ring (Pls 7–8)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ470. Gold, niello; cast, embossed, punched, engraved. Measurements: 2.2cm x 2.6cm, Wt 17.5g.

Published: Coche de la Ferté 1957 (n. 2), no. 22; Bosselmann-Ruickbie (n. 95), cat. no. 202.



Plate 7 Cat. no. 4, front of bezel



Plate 8 Cat. no. 4, profile

5. Gold finger-ring (Pls 9–10)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ469. Gold, enamel (*Grubenschmelz*); cast, embossed, punched, engraved. Measurements: 2.7 x 2.7cm, Wt 18.5g.

Published: Coche de la Ferté 1956 (n. 2), 73–4; *idem*, 1957 (n. 2), no. 23; Bosselmann-Ruickbie (n. 95), cat. no. 193.



Plate 9 Cat. no. 5



Plate 10 Cat. no. 5, detail of shoulder

6. Gold finger-ring (Pls 11–12)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ468. Gold, enamel (*Grubenschmelz*); cast, embossed, punched, engraved. Measurements: W. 2.6 x 2.6cm, Wt 17.6g.

Published: Coche de la Ferté 1956 (n. 2), 74–5; *idem*, 1957 (n. 2), no. 25; Bosselmann-Ruickbie (n. 95), cat. no. 194.



Plate 11 Cat. no. 6



Plate 12 Cat. no. 6, profile

7. Gold finger-ring (Pls 13–14)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ467. Gold, enamel (*Grubenschmelz*); cast, embossed, punched, engraved. Measurements: 2.6 x 2.7cm, Wt 19.1g.

Published: Coche de la Ferté 1956 (n. 2), 75–6; *idem*, 1957 (n. 2), no. 24; Bosselmann-Ruickbie (n. 95), cat. no. 196.



Plate 13 Cat. no. 7



Plate 14 Cat. no. 7, profile

8. Gold finger-ring (Pls 15–16)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ475. Gold, enamel (*Grubenschmelz*); cast, embossed, engraved, punched. Measurements: 2.7 x 2.7cm, Wt 18.2g.

Published: Coche de la Ferté 1956 (n. 2), 76–9; *idem*, 1957 (n. 2), no. 21; Bosselmann-Ruickbie (n. 95), cat. no. 195.



Plate 15 Cat. no. 8



Plate 16 Cat. no. 8, profile

9. Gold finger-ring (Pls 17–18)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 472. Gold, niello, carnelian. Measurements: 2.2 x 2.3cm, Wt 9g.

Published: Coche de la Ferté 1957 (n. 2), no. 28; Bosselmann-Ruickbie (n. 95), cat. no. 235.

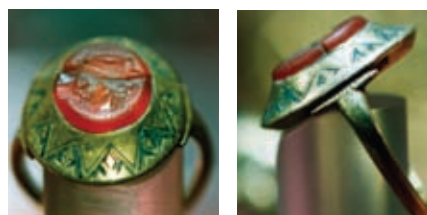


Plate 17 (left) Cat. no. 9

Plate 18 (right) Cat. no. 9, profile

10. Gold finger-ring (Pls 19–20)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 464. Gold, amethyst or ruby. Measurements: 1.9 x 2.5cm, Wt 5.0g.

Published: Coche de la Ferté 1957 (n. 2), no. 18; Bosselmann-Ruickbie (n. 95), cat. no. 237.

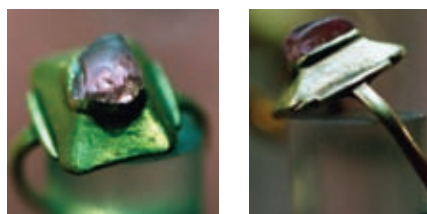


Plate 19 (left) Cat. no. 10

Plate 20 (right) Cat. no. 10, profile

11. Gold finger-ring (Pl. 21)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 466. Gold, niello, pink stone. Measurements: W. 2.03cm, H. 2.4cm, Wt 2.3g.

Published: Coche de la Ferté 1957 (n. 2), no. 19; Bosselmann-Ruickbie (n. 95), cat. no. 239.



Plate 21 Cat. no. 11

12. Gold finger-ring (Pls 22–23)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 471. Gold, niello, glass. Measurements: 2.1 x 2.4cm, Wt 4.5g.

Published: Coche de la Ferté 1957 (n. 2), no. 27; Bosselmann-Ruickbie (n. 95), cat. no. 240.



Plate 22 (left) Cat. no. 12

Plate 23 (right) Cat. no. 12, reverse of bezel

13. Gold finger-ring (Pls 24–25)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 476. Gold, niello (?); engraved. Measurements: 2.2 x 2.3cm, Wt 4.5g.

Published: Coche de la Ferté 1957 (n. 2), no. 26; Bosselmann-Ruickbie (n. 95), cat. no. 192.



Plate 24 Cat. no. 13



Plate 25 Cat. no. 13, detail of shoulder

14. Gold finger-ring (Pls 26–27)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 473. Gold, niello; engraved. Measurements: 2.4 x 2.2cm, Wt 7g. Inscription (Latin): •P•SVSEN.

Published: Coche de la Ferté 1957 (n. 2), no. 30; Bosselmann-Ruickbie (n. 95), cat. no. 199.

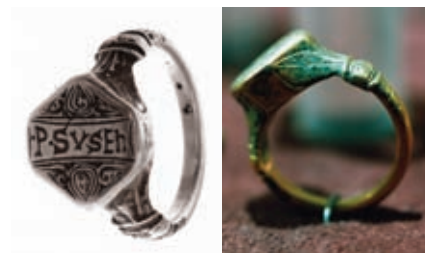


Plate 26 (left) Cat. no. 14

Plate 27 (right) Cat. no. 14, profile

15. Gold finger-ring (Pls 28–29)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 474. Gold, niello; engraved. Measurements: 2.3 x 2.4cm, Wt 9.1g.

Published: Coche de la Ferté 1957 (n. 2), no. 29; Bosselmann-Ruickbie (n. 95), cat. no. 200.



Plate 28 Cat. no. 15



Plate 29 Cat. no. 15, profile

16. Gold finger-ring (Pls 30–31)

Athens, National Archaeological Museum, Stathatos Collection, inv. no. Στ 465. Gold, pink stone; engraved. Measurements: 1.8 x 1.9cm, Wt 1.4g.

Published: Coche de la Ferté 1957 (n. 2), no. 20; Bosselmann-Ruickbie (n. 95), cat. no. 250.



Plate 30 Cat. no. 16, profile



Plate 31 Cat. no. 16, detail of hand

Notes

- 1 Many thanks to the director of the National Archaeological Museum, Dr Nikolaos Kaltsas, who generously allowed me to study and publish the objects of the Thessalonica hoard, as well as many more pieces for comparison. My studies were morally supported with great patience by Dr Niki Prokopiou whom I would also like to thank. I was able to study the objects of the Thessalonica hoard extensively in 2000, except for cat. nos 9, 10 and 14, which could not be taken out of their cases.
- 2 E. Coche de la Ferté, 'Sur quelques bagues byzantines de la Collection Stathatos', *Académie des inscriptions et belles-lettres. Comptes rendus des séances* (1956), 72; E. Coche de la Ferté, *Collection Hélène Stathatos 2: les objets byzantins et post-byzantins*, Limoges, 1957, 29.
- 3 Coche de la Ferté 1957 (n. 2).
- 4 In addition to the catalogue of the Stathatos collection he published a short essay on two pairs of the finger-rings from the hoard (cat. nos 5–8: Coche de la Ferté 1956 (n. 2).
- 5 Even though I had the opportunity to study the bracelets intensively, it was difficult to determine the number of wires employed.
- 6 The motif is surely derived from ivy leaves so their description as 'heart-shaped' is not strictly speaking correct: see U. Koenen, 'Die Artukiden-Schale als Zeugnis der "Grenzgänge"', in U. Koenen and M. Müller-Wiener (eds), *Grenzgänge im östlichen Mittelmeerraum. Byzanz und die islamische Welt vom 9. bis 13. Jahrhundert*, Wiesbaden, 2008, 121–46, 140.
- 7 Coche de la Ferté 1957 (n. 2), no. 32.
- 8 N. Özgüç, 'Sümeysat Defininesi', *Belleten* XLIX (1985), pls 23, 24.
- 9 M. Vaklinova, *Mittelalterliche Schmuckstücke aus Bulgarien (6.-14. Jahrhundert)*, Sofia, 1981, no. 22, found with coins.
- 10 Damascus, National Museum, inv. no. 8966.
- 11 Damascus, National Museum, inv. nos 8967, 8989, 7483.
- 12 Two further comparable penannular bracelets with heart-shaped finials are in a private collection in New York: one has a solid hoop, the other a hoop made from plaited wires. They have been labelled 'Islamic' and dated to the 12th–13th centuries by comparison with the Stathatos pair which does not, therefore, help in the dating of the Stathatos bracelets: B. Deppert-Lippitz, *The Gift of the Gods. Jewelry from the Ancient World. Catalogue of the Fortuna Fine Arts Ltd. New York*, New York, 1998, nos 182, 183.
- 13 For example, Vaklinova (n. 9), no. 30 ('14th century').
- 14 M. Bárány-Oberschall, *The Crown of the Emperor Constantine Monomachos* (Archaeologia Hungarica 22), Budapest, 1937; N. Oikonomides, 'La couronne dite de Constantin Monomaque', *Travaux et Mémoires* 12 (1994), 241–62; H.C. Evans and W.D. Wixom (eds), *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era A.D. 843–1261*, Metropolitan Museum of Art, New York, 1997, no. 145 (H. Maguire); E. Kiss, 'The State of Research on the Monomachos Crown and Some Further Thoughts', in O.Z. Pevny (ed.), *Perspectives of Byzantium and its Neighbours (843–1261)*, Yale, 2000, 60–83. The authenticity of the 'Monomachos Crown' has been questioned by Oikonomides. However, Kiss has responded to Oikonomides' essay by gathering many, in my opinion, good arguments for the authenticity of the 'Monomachos Crown'. One of the exceptional features of the enamelled *Senkschmelz* plaques is that they are made only of one sheet of gold as opposed to the usual two sheets with different alloys (compare the diadem plaques of the 10th-century Preslav treasure made of two sheets, probably in Constantinople in 927 (?); M. Puhle (ed.), *Otto der Große. Magdeburg und Europa* (Kulturhistorisches Museum Magdeburg), Mainz, 2001, vol. 2, no. VI.58b (A. Bosselmann); A. Bosselmann-Rückbie, 'Goldener Glanz aus Byzanz. Der Schatzfund von Preslav (Bulgarien) – Ein kaiserliches Geschenk an einen 'barbarischen' Regenten', *Antike Welt* 6 (2004), 78–9 and 80, pl. 5. David Buckton is, like Oikonomides, of the opinion that the 'Monomachos Crown' is not authentic (letter 24 September 2008 with abstract of the discussions during the Leverhulme Seminar on the 'Monomachos Crown' in 2002/3).
- 15 The 'Artukid Bowl', with its close connections to Byzantine enamel work, but with an Arabic and Persian inscription, has long been disputed with regards to its origin (Byzantine?, Islamic?). The inscription mentioning the Artukid Ruler Rukn ad-Daula Daud (1114–44) points to the 12th century; however, David Buckton is of the opinion that it must be dated later than the 12th century (letter dated 2 June 2008). Neslihan Asutay-Effenberger has recently argued for a Saljūq provenance ('Überlegung zur Datierung und Lokalisierung der Innsbrucker Artukiden-Schale', *Byzantion* 79 (2009), 37–47, with the older literature). According to her research the bowl was probably made in a Greek workshop in Saljūq Anatolia. It might have been a wedding present for Rukn ad-Daula Daud or part of the dowry of his bride, the Saljūq princess Sacide Hatun whom he married some time before her death in 1130, and the bowl should be dated accordingly.
- 16 T. Steppan, 'Die Artukiden-Schale. Emailkunst in Spannungsfeld byzantinischer und islamischer Kultur', in T. Steppan (ed.), *Die Artukiden-Schale im Tiroler Landesmuseum Ferdinandeum Innsbruck: Mittelalterlicher Emailkunst zwischen Orient und Occident*, Munich, 1995, 13–35, at 27–8. See also the list of heart-shaped garment decorations on Byzantine enamels on *ibid.*, 27, n. 46.
- 17 R. Oosterhout, 'The Byzantine Heart', *Zograf* 17 (1986), 36–44, at 40.
- 18 *Ibid.*, 43.
- 19 *Ibid.*, 43.
- 20 A. von Gladiss, *Schmuck im Museum für islamische Kunst, Staatliche Museen zu Berlin*, Berlin, 1998, 116; Coche de la Ferté 1957 (n. 2), 31. The motif of opposed birds flanking a tree of life (or fountain, etc.) appears also in Early Byzantine art, for example on lunular-shaped *opus interrasile* earrings. Only a few examples show addorsed birds (A. Yeroulanos, *Diatrita. Gold pierced-work jewellery from the 3rd to the 7th century*, Athens, 1999, nos 556–61, 565–7 [peacocks]), whilst the majority show confronted birds flanking palmettes, fountains or crosses (*eadem*, nos. 488–552). The early examples are different in that their proportions are broader and that the crossed tails are lacking.
- 21 R. Hasson, *Early Islamic Jewellery*, L.A. Mayer Institute for Islamic Art, Jerusalem, 1987, nos 42–3; for similar representations of birds see: P. Ackerman, 'Jewelry in the Islamic period', in A. Upham Pope and P. Ackermann (eds), *Survey of Persian Art* 3, Oxford, 1939, pl. 1353a; E. Baer, *Metalwork in Medieval Islamic Art*, Albany, 1983, pl. 135; von Gladiss (n. 20), 116–17, no. 57, with further parallels for the motif.
- 22 For example on a lustre bowl from Cairo, dated to the early 12th century: E. Baer, *Sphinxes and Harpies in Medieval Islamic Art. An Iconographical Study*, Jerusalem, 1965, pl. 2, no. 6.
- 23 London, British Museum, inv. no. 1878, 12–30, 562, Henderson Bequest, unpublished, from Kashan, Iran, according to the museum register 'c. 1300'.
- 24 For example, F. Keller and G. Wolf-Keller (eds and trans.), *1000 Jahre Russische Kunst. Zur Erinnerung an die Taufe der Rus' im Jahr 988* (Schleswig-Holsteinisches Landesmuseum Schloß Gottorf, Hessisches Landesmuseum Wiesbaden), Hamburg, 1988, no. 263 (O.M. Ioannisjan, I.A. Bobrovnickaja, I.M. Martynova, I.M. Sokolova, from the excavations of the old city of Izjaslavl, 'Kiev (?), 12th/13th centuries'); *Gold aus Kiev. 170 Meisterwerke aus den Schatzkammern der Ukraine* (Kunsthistorisches Museum Wien), Vienna, 1993, no. 115 ('11th–13th century'); Evans and Wixom (n. 14), no. 212 (K.R. Brown, '11th–12th centuries'); L. Pekarska, 'Treasures from Ancient Kiev in the Metropolitan Museum of Art and Dumbarton Oaks', *Metropolitan Museum Journal* 32 (1997), 73–4 and pl. 4; Y. Piatnitsky, O. Baddeley and E. Brunner, *Sinai, Byzantium, Russia. Orthodox Art from the Sixth to the Twentieth Century* (The State Hermitage Museum St Petersburg, Courtauld Gallery, Somerset House, London), London, 2000, no. R2b (V. Zaleskaya, 'Kievan Rus' [Kiev], 12th century'). See also Pekarska, this volume, Pls 1 and 3.
- 25 Ceramic plate, probably from Kiev, 11th century: Keller and Wolf-Keller (n. 24), no. 268, pl. on 201; pendant (without the tree of life in the centre), 10th–12th centuries: B. Khanenko, *Collection B. Khanenko: Antiquités de la Région du Dniepr*, vol. 5, Kiev, 1902, 35, pl. 17, no. 366; bronze arch of an altar, Tchernigov, signed by Master Konstantin, second half of 12th century: Keller and Wolf-Keller (n. 24), no. 265, pl. on 201; fragment of a fresco from Smolensk, c. 1200: *ibidem*, no. 22, pl. on 28.
- 26 *Gold aus Kiev* (n. 24), no. 128 ('12th century, Byzantium [?]').
- 27 G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque Art 1066–1200* (Hayward Gallery, London), London, 1984, no. 295 (N. Stratford).
- 28 *Ibid.*, no. 295 (N. Stratford).
- 29 L. Rodley, *Byzantine Art and Architecture. An Introduction*, Cambridge, 1996, 210, pl. 163.

- 30 The so-called Heroon between the north and south church was, according to research by Lioba Theis, a later addition to the complex, probably dating to the Palaiologan period: L. Theis, *Flankenräume im mittelbyzantinischen Kirchenbau. Zur Befundunsicherung, Rekonstruktion und Bedeutung einer verschwundenen architektonischen Form in Konstantinopel*, Wiesbaden, 2004, 115–26, esp. 125–6.
- 31 There are only differences in details such as the three-lobed leaves growing out of the stem of the tree of life or the roots of the trees.
- 32 E. Hein, A. Jakovljević and B. Kleidt, *Zypern – byzantinische Kirchen und Klöster. Mosaiken und Fresken*, Ratingen, 1996, 148–53, fig. 158; S. and J.A. Stylianou, *The Painted Churches of Cyprus. Treasures of Byzantine Art*, Nicosia, 1997 (2nd ed.), 469–85. The paintings ‘appear to be a variant interpretation of the late Comnenian style of the capital, as it appears in the church of Panagia tou Arakou at Lagoudera (1192)...’ (*ibid.*, 479).
- 33 Puhle (n. 14), vol. 2, nos VI.58a–j (A. Bosselmann); Bosselmann-Ruickbie (n. 14).
- 34 7th to 15th centuries, see E. Schilbach, *Byzantinische Metrologie*, Munich, 1970, 162–8; E. Schilbach, ‘Maß und Gewicht in Byzanz’, in C. Stiegemann (ed.), *Das Licht aus dem Osten. Kult und Alltag im Byzantinischen Reich vom 4. bis 15. Jahrhundert* (Erzbischöfliches Diözesanmuseum Paderborn), Mainz, 2001, 245–7; see also O. Mazal, *Handbuch der Byzantinistik*, Graz, 1989, 190.
- 35 *Book of the Eparch*, 32; P. Schreiner, ‘Die Organisation byzantinischer Kaufleute und Handwerker’, in H. Jankuhn and E. Ebel (eds), *Untersuchungen zu Handel und Verkehr der vor- und frühgeschichtlichen Zeit in Mittel- und Nordeuropa IV: Organisationsformen der Kaufmannsvereinigungen in der Spätantike und im frühen Mittelalter. Bericht über die Kolloquien der Kommission für die Altertumskunde Mittel- und Nordeuropas in den Jahren 1980 bis 1985*, Göttingen, 1989, 48, and n. 21 regarding the provenance of the manuscript.
- 36 *Book of the Eparch*, ch. 22.4, 140–3.
- 37 C. Morrisson and J.-C. Cheynet, ‘Prices and Wages in the Byzantine World’, in A.E. Laiou (ed.), *The Economic History of Byzantium: From the Seventh Through the Fifteenth Century* (Dumbarton Oaks Studies 39), vol. 2, Washington DC, 2002, 856, table 15 (A. Meineke [ed.], *Ioannis Cinnami, Epitome rerum ab Ioanne et Alexio Comnenis gestarum*, Bonn, 1836, 25).
- 38 Morrisson and Cheynet (n. 37), 832, table 7, (P. Gautier, ‘Le typikon du Christ Sauveur Pantocrator’, *Revue des études byzantines* 32 [1974], no. 3).
- 39 *Ibid.*, 839, table 11 (Meineke [n. 37], 154).
- 40 *Ibid.*, 816, table 1.
- 41 *Ibid.*, 839, table 11 (J. Lefort, N. Oikonomides and D. Papachryssanthou (eds), *Actes d’Ivion 2, Archives de l’Athos*, Paris, 1990, 9).
- 42 See Ousterhout (n. 17).
- 43 Not genuine turquoise as stated by Coche de la Ferté 1957 (n. 2), 32.
- 44 From the Bronze Age at the latest animal heads appear as finials of bracelets, necklaces or earrings, especially in the Hellenistic and Roman periods (with rams, bulls, snakes, antelopes, lynxes, goats, lions or mythical beasts). These prototypes were then developed by East Germanic tribes on the Black Sea coast and are found in the art of the Migration Period: e.g., M. Bertram (ed.), *Merowingerzeit. Die Altertümer im Museum für Vor- und Frühgeschichte, Staatliche Museen zu Berlin – Preussischer Kulturbesitz*, Mainz, 1995, 45, col. pl. 19 accompanied by cat. entry (M. Bertram). For examples of rings with animal heads from western Medieval art: H. Battke, *Ringe aus vier Jahrtausenden. Aus der Sammlung Battke im Schmuckmuseum Pforzheim*, Pforzheim, 1963, no. 36 (‘found in the region of the lower Rhineland, late Romanesque, end of 12th/early 13th century’); H.-U. Haedeke, *Schmuck aus drei Jahrtausenden: Sammlung Hanns-Ulrich Haedeke*, Cologne, 2000, no. 132 (‘England, 12th century’). In Scandinavian medieval art animal motifs and ornaments are among the most important decorative elements: see for example, *Wikinger, Waräger und Normannen. Die Skandinavien und Europa 800–1200* (Altes Museum Berlin, Grand Palais Paris, Nationalmuseum Kopenhagen), Berlin, 1992, 176; Puhle (n. 14), vol. 2, no. VI.95 (L. Révész, ‘10th century’).
- 45 Bertram (n. 44), 45, col. pl. 19.
- 46 For an example from Bulgaria: Preslav, National-Archaeological Museum ‘Veliki Preslav’, inv. no. 550, 3274 (9th–10th century, unpublished); see also, *Greek Jewellery. 6000 years of Tradition* (Ed. by Ministry of Culture and Archaeological Receipts Fund, Villa Bianca Thessalonica), Athens, no. 181 (N. Moutsopoulos), dated to the early Byzantine period (5th century?), but on the basis of comparisons with other archaeological material should certainly be dated to the Middle Byzantine period.
- 47 V. Lahtov, ‘Ranosrednovekoven nakit vo srednovekovnata zbirka na Narodniot Musei vo Ohrid’, *Lihnid* 1 (1957), 77–8; E. Maneva, *Srednovekoven nakit od Makedonija*, Skopje, 1992, 176, no. 50/1. I would like to thank Natalija Ristovska for drawing my attention to this parallel.
- 48 B.A. Rybakov, *Russian Applied Art of the Tenth to Thirteenth Centuries*, Leningrad, 1971, 24, pl. 22.
- 49 *Islamische Kunst. Meisterwerke aus dem Metropolitan Museum of Art New York* (Museum für Islamische Kunst, Staatliche Museum Preussischer Kulturbesitz, Berlin), Berlin, 1981, no. 43 (‘11th–12th century’); S. Bury, *Jewellery Gallery: Summary Catalogue* (Victoria & Albert Museum), London, 1982, case 11, board E, no. 7 (‘Persian [Saljūq], 12th century’).
- 50 In a few instances genuine turquoise is found on other Middle Byzantine goldsmiths’ works: on the frame of a lapis lazuli icon in the Louvre, Paris (R. Cormack and M. Vassilaki [eds], *Byzantium 330–1453*, London, 2008, no. 200 [J. Durand]), and with other stones and pearls on the side of a cross in Tournai, Belgium (F. de Cuyper, G. Demortier and J. Pycke, *La croix du trésor de la cathédrale de Tournai*, Publications de l’histoire et de l’art et d’archéologie de l’Université Catholique de Louvain LII, Aurifex 7, Tournai, 1987, figs 16, 21, 24, 25).
- 51 However, this technique differs from the Early Byzantine *opus terrassile* found on earrings and other jewellery: see Yeroulanou (n. 20) on this technique and an exhaustive catalogue.
- 52 B. Segall, *Katalog der Goldschmiede-Arbeiten: Benaki Museum, Athen*, Athens, 1938, no. 286; see also, A. Bosselmann-Ruickbie, ‘Byzantinisch, Islamisch oder “Internationaler Stil”? Email und Körchenohrringe aus dem östlichen Mittelmeerraum’, in Koenen and Müller-Wiener (n. 6), 83–114, figs 7, 8.
- 53 Coche de la Ferté 1957 (n. 2), 33.
- 54 Coche de la Ferté 1957 (n. 2), no. 31.
- 55 Letter from Prof. Dr Werner Seibt, University of Vienna, Austria, 26 June 2003.
- 56 O.M. Dalton, *Franks Bequest. Catalogue of the Finger Rings, Early Christian, Byzantine, Teutonic, Mediaeval and Later*, London, 1912, no. 94; D. Buckton (ed.), *Byzantium: Treasures of Byzantine Art and Culture from British Collections*, London, 1994, no. 215 (C. Entwistle); H.C. Evans (ed.), *Byzantium: Faith and Power (1261–1557)*, New York, 2004, no. 15 (V. Zaleskaya).
- 57 Dalton (n. 56), no. 94.
- 58 Buckton (n. 56), no. 215 (C. Entwistle).
- 59 Evans (n. 56), no. 15 (V. Zaleskaya).
- 60 Letter from Prof. Dr Werner Seibt, University of Vienna, Austria, 10 May 2001.
- 61 D. Papanikola-Bakirtzi (ed.), *Byzantine Glazed Ceramics. The Art of Sgraffito* (Museum of Byzantine Culture, Thessaloniki), Athens, 1999, no. 3 (I. Tzonou-Herbst).
- 62 The central dot within the hoop of the ring may be a compass point, whilst the striations along the inner border of the ring might be explained as an attempt at three dimensionality.
- 63 M. Jenkins and M. Keene, *Islamic Jewellery in the Metropolitan Museum of Art*, New York, 1982, no. 49b (‘Egypt, 11th century’); D.J. Content (ed.), *Islamic Rings and Gems. The Benjamin Zucker Collection*, London, 1987, no. 13 (‘Fatimid, early 11th century’); Segall (n. 52), no. 311 (‘purchased as Persian, 13th century’); A. Ballian, *Benaki Museum. A Guide to the Museum of Islamic Art*, Athens, 2006, no. 63 (‘Iran, 12th century’).
- 64 Ballian (n. 63), no. 63.
- 65 M.C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection 2: Jewellery, Enamels and Art of the Migration Period*, Washington DC, 1965, no. 128 (‘13th century’).
- 66 Coche de la Ferté 1956 (n. 2), 73.
- 67 Coche de la Ferté 1957 (n. 2), 41–2.
- 68 Coche de la Ferté 1956 (n. 2), 73–4; Coche de la Ferté 1957 (n. 2), 42.
- 69 Coche de la Ferté 1956 (n. 2), 74; G. Schlumberger, *Sigillographie de l’empire byzantin*, Paris, 1884, 177–8, 710–11.
- 70 Baer (n. 22), no. 30 (‘probably from north-west Persia, c. early 13th century’).
- 71 *Ibid.*, no. 33 (‘Persia or Asia Minor, 13th century’).
- 72 *Ibid.*, no. 96.

- 73 *Ibid.*, 17, n. 67; S. Ögel, 'Selçuk sanatında çift gövdeli aslant figürü', *Belleten* XXVI (1962), 529–38.
- 74 Haedeke (n. 44), no. 133. The ring is in the private collection of Hanns-Ulrich Haedeke. He assumed that it was actually found somewhere in the Balkans (pers. comm. 17 October 2008).
- 75 Bury (n. 49), case 32, board G, no. 32.
- 76 Zarnecki *et al.* (n. 27), nos 471–3, 346, nos 1, 6 (London bindings), no. 474 (Durham bindings), 348, no. 13.
- 77 N.S. Trahoulia, *The Greek Alexander Romance* (Venice Hellenic Institute Codex Gr. 5), Athens, 1997, 29.
- 78 For example, Armenian, Syrian, Coptic, Serbian, etc. (Trahoulia [n. 77], 29).
- 79 H.J. Gleixner, 'Alexander der Große', *Reallexikon zur Byzantinischen Kunst* I, Stuttgart, 1966, 96–9.
- 80 For example: ivory plaque: Evans and Wixom (n. 14), no. 151 (M. Georgopoulos, 'first half of 10th century'); stone reliefs: Museum of Thebes ('10th/11th century'), Constantinople ('12th/13th century'), Venice (outer wall of San Marco, '12th/13th century'), Docheiariou, Mount Athos ('14th century') and Mistra ('14th century'), all mentioned in: *Byzantine and Post-Byzantine Art* (Ministry of Culture, Byzantine and Christian Museum Athens), Athens, 1985, no. 15 (A. Bakourou); floor mosaic, Otranto, Italy ('1165'): Gleixner (n. 79), 96–9; 'Artukid Bowl', see n. 16; 'Kilian's flag': Puhle (n. 14), vol. 2, cat. no. IV.65, 280–1 (R. Schorta, '10th century').
- 81 See Bosselmann-Ruickbie (n. 14).
- 82 Ross (n. 65), no. 122 ('11th century'). The ring was supposedly found in Constantinople.
- 83 See n. 15.
- 84 The animals on the Stathatos ring were described as eagles by Coche de la Ferté who assumed that this depiction must have derived from Persia where the king's throne was usually flanked by animals (*ibidem*, [n. 2], 76–8). However, looking at the beasts they do indeed seem odd, but they could well be griffins rather than eagles and would hence be in accordance with the legend described in the *Alexander Romance*. The scene appears to be slightly misunderstood, for it seems as if Alexander is strangling the animals as opposed to holding out meat for them as an incentive to carry him heavenwards.
- 85 See Bosselmann-Ruickbie (n. 14).
- 86 Steppan 1995 (n. 16), 18. Whether the 'Artukid Bowl' itself was an imperial gift or not has been disputed (see n. 15).
- 87 M. Restle, 'Das Gunthertuch im Domschatz von Bamberg', in K. Belke, E. Kislinger, A. Külzer and M. Stassinopoulou (eds), *Byzantina Mediterranea. Festschrift für Johannes Koder zum 65. Geburtstag*, Vienna-Cologne-Weimar, 2007, 547–68.
- 88 I. Spatharakis, *Corpus of Dated Illuminated Greek Manuscripts to the Year 1453*, Leiden, 1981, nos 58, pl. 105 (1054, however, the circles are not connected in this example), 156, pl. 299 (1167), 199, pl. 365 (1289).
- 89 J. Fleischer, Ø. Hjort and M.B. Rasmussen (eds), *Late Antique and Byzantine Art in Scandinavian Collections* (Ny Carlsberg Glyptotek Copenhagen), Copenhagen, 1996, no. 101.
- 90 Coche de la Ferté 1956 (n. 2), 73.
- 91 *Ibid.*; Coche de la Ferté 1957 (n. 2), 43 (esp. n. 1 with literature), 42, fig. 33. The precise origin of this motif is unknown, but again interesting comparisons can be made with some of the filigree ornament found on Fatimid jewellery, in particular those pieces decorated with rows of wire bent to form the number eight. These eights appear organised in rows on much Fatimid jewellery including finger-rings, bracelets, earrings, beads, hair pins and necklaces: see, for example, T. Falk (ed.), *Treasures of Islam* (Musée d'Art et d'Histoire, Genf/Sotheby's), London, 1985, nos 355–6; T. Hackens and R. Winkes, *Gold Jewelry. Craft, Style and Meaning from Mycenae to Constantinople*, Louvain-la-Neuve, 1983, no. 45; Jenkins and Keene (n. 63), nos 47–8; Evans and Wixom (n. 14), no. 278 (M. Jenkins-Madina); von Gladiss (n. 20), nos 22, 52; Hasson (n. 21), nos 99, 109–14. Some of the few reliably dated pieces of jewellery come from the treasure of Ifriqiya in Tunisia, which were probably produced in Fatimid Egypt and buried around 1049/50: M. Jenkins, 'Fatimid Jewelry: Its Subtypes and Influences', *Ars Orientalis* 18 (1988), 39. This characteristic filigree of eights appears also on many basket-shaped earrings, which probably represent a Fatimid earring type: for example, P. Amandry (ed.), *Collection Hélène Stathatos 3: Objets antiques et byzantins*, Straßburg, 1963, no. 22obis; A. Gonosová and C. Kondoleon, *Art of Late Rome and Byzantium in the Virginia Museum of Fine Arts*, Richmond, 1994, nos 28, 30, probably also no. 29; Evans and Wixom (n. 14), no. 275 (M. Jenkins-Madina); *Greek Jewellery* (n. 46), no. 279 (N. Saraga); L. Wamser (ed.), *Die Welt von Byzanz – Europas östliches Erbe* (Archäologische Staatssammlung München), Munich, 2004, no. 625 (A. Bosselmann-Ruickbie). See Bosselmann-Ruickbie (n. 52), for basket-shaped earrings in general and their derivation, with a list of the over 50 preserved examples (86–7, n. 21–2). Perhaps the enamelled framing ornaments on the square bezels of the two rings are a stylised form of Fatimid filigree?
- 92 M. Brandt and A. Effenberger (eds), *Byzanz. Die Macht der Bilder* (Dom-Museum Hildesheim), Hildesheim, 1998, 109, no. 49, pl. 91a-b; V. Pace (ed.), *Treasures of Christian Art in Bulgaria*, Sofia, 2001, no. 44 (M. Vaklinova).
- 93 Coche de la Ferté 1957 (n. 2), 26, thought that the gem, which shows a mask of the new Attic comedy, could be dated either to the Hellenistic or early Roman imperial period. According to Jeffrey Spier this gem is 'a 1st century BC Roman (maybe from Italy) carnelian showing a comic theatre mask' (pers. comm. 13 February 2009).
- 94 *Das Reich der Salier 1024–1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz* (Römisch-Germanisches Zentralmuseum/Bischöfliches Dom- und Diözesanmuseum Mainz), Sigmaringen, 1992, 444, no. 26 (M. Schulze-Dörrlamm); Haedeke (n. 44), 97.
- 95 G. Davidson, *Corinth: Results of the Excavations conducted by the American School of Classical Studies at Athens. Vol. XII: The Minor Objects*, Athens and Princeton NJ, 1952, no. 1827; see also, A. Bosselmann-Ruickbie, *Byzantinischer Schmuck des 9. bis frühen 13. Jahrhunderts. Untersuchungen zum metallenen dekorativen Körperschmuck der mittelbyzantinischen Zeit anhand datierter Funde*, Phil. Diss., Bonn, forthcoming 2010, cat. no. 236. The ring has today lost its (semi-) precious or rather glass stone. The dating to the 11th century does not seem entirely convincing, since similar objects were dated – mostly for stylistic reasons – to the 13th to 14th century (e.g., Haedeke (n. 44), nos 145–8). Therefore, the Corinth ring might be dated later despite the fact that it comes from an excavated context which seems to suggest that its dating is reliable. Other jewellery finds from Corinth, which were excavated in the first half of the 20th century, have already been re-dated because the dating suggested by the excavators did not seem convincing: Bosselmann-Ruickbie *ibid.*, chapter II.D.2. Grabfund aus Korinth (grave find from Corinth), see Davidson *ibid.*, nos 1821, 1830, 1927, 2030, 2036–7, 2461, finds from a grave dated by her to the 6th or 7th century, re-dated Middle Byzantine, probably 9th or early 10th century.
- 96 C. Oman, *Catalogue of Rings*, Victoria and Albert Museum, Department of Metalwork, London, 1930, no. 224; J. Spier, 'Middle Byzantine (10th–13th century AD) stamp seals in semi-precious stone', in C. Entwistle (ed.), *Through a Glass Brightly. Studies in Byzantine and Medieval Art and Archaeology Presented to David Buckton*, Exeter, 2003, 117, no. 4.
- 97 The gem shows the inverted ligature 'OA' on one side and the abbreviation 'ΘEO' on the other. This can be read as 'O A(Γ)IOC ΘEO(ΔΘ)POC' ('St Theodore'), after Spier (n. 96), 117, no. 4. Oman (n. 96), no. 224, read 'Joannis o Theologos' ('John the Theologian'), which, however, seems less convincing for the usual abbreviation 'Iω' (for 'Johannes') is missing.
- 98 Oman (n. 96), no. 224, dated the ring to the 11th century without giving any supporting evidence.
- 99 Spier (n. 96), 116.
- 100 D. Hinton, *Medieval Jewellery from the Eleventh to the Fifteenth Century*, Aylesbury, 1982, 26, pl. 6; Zarnecki *et al.* (n. 27), nos 319a–r, 320a–f (N. Stratford); H. Tait, *Seven Thousand Years of Jewellery*, London, 1995 (3rd ed.), 139, nos 313–5. The Lark Hill treasure can very likely be connected with the baronial troubles of 1173/4.
- 101 Zarnecki *et al.* (n. 27), nos 319a–r (N. Stratford). According to Stratford the hoard 'is likely to be of local origin since the West Country mints are relatively well represented' (*ibid.*, 292). However, he also states that the foreign coins mean 'that the English origins of the Lark Hill rings can be no more than a strong presumption' (*ibid.*, 293).
- 102 Mentioned in *Das Reich der Salier* (n. 94), 444, no. 26 (M. Schulze-Dörrlamm).
- 103 *Ibid.* The two rings were found in the centre of the city of Hasselt in Belgium together with a 'Buckelfibel mit Trommelkranz' (round

- fibula with a 'drum' design around the centre). This fibula was dated by Schulze-Dörrlamm to the second third of the 11th century and according to her provides a *terminus post quem* for the burial. She mentions another datable ring from the grave of abbot Eberhard (1135–55) from the Stifskirche in Königsutter, Germany.
- 104 F. Ronig, *Schatzkunst Trier. Kunst und Kultur in der Diözese Trier* 3, Trier, 1984, no. 55c (F. Ronig).
- 105 *Ibid.*, no. 55e (F. Ronig).
- 106 Zarnecki *et al.* (n. 27), no. 324c (N. Stratford).
- 107 G. Jászai, *Grabungsfunde aus der Bremer Dom*, Greven, 1978, no. 7 (grave 23, 'northern Germany, second half of the 12th century').
- 108 *Ibid.*, no. 9 (grave 19, 'probably England, around 1200').
- 109 Battke (n. 44), no. 35, with a tourmaline cabochon.
- 110 Haedeke (n. 44), no. 131 ('Germany, 12th century').
- 111 S. Hindman, *Toward an Art History of Medieval Rings: A Private Collection*, London, 2007, no. 17.
- 112 *Ibid.*, no. 142.
- 113 More examples dated to the 12th/13th centuries, however, many of them with an irregular bezel shape, a supposedly later development: Haedeke (n. 44), nos 132 ('England, 12th century'), 134 ('western Europe, 12th century'), 135 ('western Europe, mid-13th century'), 136 ('England, mid-13th century'), 137 ('western Europe, mid-13th century'), 138 ('Germany, 13th century'), 139 ('England, mid-13th century'), 140 ('England, mid-13th century'), and 141 ('England, 13th century').
- 114 *Ibid.*, nos 132 ('England, 12th century'), 133 ('Europe, second half of the 12th century'), and 144 ('western Europe, first half of the 13th century').
- 115 *Ibid.*, no. 133.
- 116 The other silver ring in the private collection has four triangular motifs on the bezel, although these are simply engraved and not nielloed: Haedeke (n. 44), no. 144. The ring is dated on the basis of a comparison with the already mentioned ring in Pforzheim (Battke [n. 44], 24, no. 35) to the 13th century, although evidence for the dating is lacking.
- 117 Haedeke (n. 44), no. 132.
- 118 Rybakov (n. 48), pl. 19.
- 119 *Ibid.*, 31–4, pls 31–3.
- 120 *Museum of Historical Valuables of the Ukrainian SSR*, Kiev, 1973, 33, pl. left.
- 121 For example Ross (n. 65), no. 117; *Byzance. L'art byzantin dans les collections publiques françaises* (Musée du Louvre, Paris), Paris, 1992, no. 219 (J.-C. Cheynet, C. Morrisson).
- 122 Wamser (n. 91), no. 684 (C. Schmidt).
- 123 Unpublished, pers. comm. Dr Jannic Durand, Musée du Louvre, Paris, 2001.
- 124 E. Taburet-Delahaye, 'A propos de l'anneau dit de Maurice de Sully conservé au Louvre. Quelques précisions sur les fouilles de Viollet-le-Duc à Notre Dame de Paris en 1858 et le vol dans le trésor en 1860', *Bulletin de la société nationale des antiquaires de France* (2000), 278–9. The ring was probably originally set with a sapphire or a gem instead of a carnelian: *eadem*, 272.
- 125 Ronig (n. 104), no. 55e (F. Ronig).
- 126 Tait (n. 100), 137, pl. 309.
- 127 Coche de la Ferté 1957 (n. 2), 47.
- 128 *Ibid.*, 47.
- 129 *Ibid.*, 49. According to Coche de la Ferté this inscription cannot have been executed before the 13th century.
- 130 Evans and Wixom (n. 14), no. 190 (E. Dauterman Maguire, 'late 12th–early 13th century'); Papanikola-Bakirtzi (n. 61), no. 208 (I. Tuonou-Herbst, '1180–1200').
- 131 Papanikola-Bakirtzi (n. 61), no. 48 (C. Koilakou).
- 132 Falk (n. 91), no. 218.
- 133 For example Spatharakis (n. 88), no. 175 ('1225').
- 134 C.M. Fandrey, *Das Oswald-Reliquiar im Hildesheimer Domschatz*, Göttingen, 1987, 106–8; M. Brandt (ed.), *Kirchenkunst des Mittelalters. Erhalten und Erforschen* (Diözesan-Museum Hildesheim), Hildesheim, 1989, no. 9 (M. Brandt *et al.*), especially 135 and pls 33–4; M. Brandt (ed.), *Abglanz des Himmels. Romanik in Hildesheim* (Dom-Museum Hildesheim), Regensburg, 2001, nos 4–23 (M. Brandt).
- 135 For example F. Marshall, *Catalogue of Finger Rings, Greek, Etruscan and Roman in the Department of Antiquities, British Museum*, London, 1907, nos 1004 ('13th century'), 1006 ('England, 14th century'); Dalton (n. 56), nos 1027 ('Italy, 14th century'), 1008, 1012, 1017, 1019, 1028, 1030, 1035 ('15th century'); Battke (n. 44), nos 81–3 ('16th–17th century'); Hindman (n. 111), no. 22.
- 136 See notes 100–1; for a finger-ring with hands: Dalton (n. 56), no. 1025; Hinton (n. 100), 26, pl. 6; Zarnecki *et al.* (n. 27), no. 320f (N. Stratford); Tait (n. 100), 139, no. 318.
- 137 According to Hinton (n. 100), 31, stirrup-shaped rings 'were probably still worn in the fifteenth [century]', but to my knowledge there are no dated examples from this period.
- 138 For example Battke (n. 44), no. 61 ('English, second half of 12th century to first half of 13th century'); B. Chadour and R. Joppien, *Schmuck I: Hals-, Ohr-, Arm- und Gewandschmuck, II: Fingerringe* (Kunstgewerbemuseum der Stadt Köln), Cologne, 1985, no. 196 ('England [?], 12th–14th century'); Haedeke (n. 44), nos 122 (two rings, 'England, 12th–13th century'), 123 ('England, 11th century'), 124 (four rings, 'England' and 'Germany', '12th–14th century'), 125 ('England, first half of the 14th century'), 126 ('England, first half of the 14th century'); Hindman (n. 111), no. 16 ('England, or possibly France, c. 1200').
- 139 *Das Reich der Salier* (n. 94), 338, case 2,1 (M. Schulze-Dörrlamm, 'probably first half of the 11th century'); Jászai (n. 107), no. 24 (grave 6, 'Bezelin?, died 1043 ... northern Germany, 11th century'), with further examples from the grave of Archbishop Aribio, Mainz, Germany (d. 1038) and from the grave of bishop Maurus, Krakow, Poland (d. 1118). For more examples see, Chadour and Joppien II (n. 138), no. 196.
- 140 Zarnecki *et al.* (n. 27), no. 318 (N. Stratford). The inventory was written between 1251 and 1259 by the monk Matthew Paris (d. 1259).
- 141 A. Ward, J. Cherry, C. Gere and B. Cartlidge, *Rings through the Ages*, Fribourg, 1981, no. 120.
- 142 Zarnecki *et al.* (n. 27), 291, no. 315 (N. Stratford); Tait (n. 100), 138–9, no. 312.
- 143 A date relating to the Norman capture of Thessalonica in 1185 (see E. Vacalopoulos, *A History of Thessaloniki* (Institute for Balkan Studies 63), Thessalonica, 1984 [reprint of the 1972 ed.], 42–6) seems too early given both the dates of the comparative objects and the coins found with the treasure.
- 144 *Ibid.*, 47–8.
- 145 *Ibid.*, 48–9.

Some Aspects of the Finger-Rings in the Chalcis Treasure at the British Museum

Bet McLeod

This 'work-in-progress' focuses on the four finger-rings in the Chalcis Treasure in the British Museum (Pls 1–8).¹ It is a summary of research undertaken for the 'Intelligible Beauty' conference in London, May 2008 and two presentations in Greece, January 2009.² A forthcoming publication will provide a full analysis of the social, cultural and historical background to the Treasure, with an in-depth study of all the pieces that make up the Treasure.³

To summarise, the Chalcis Treasure derives its name from its find spot, the town of Chalcis (modern Halkida) on the island of Negroponte (modern Euboea, Greece). The harbour and fortress town of Chalcis, strategically located between Venice and Constantinople, was one of the most significant trading posts in the Venetian maritime empire during the late 13th and 14th centuries. At this time, the Venetian maritime empire comprised much of the Dalmatian coast, Crete, some of the Aegean islands including Negroponte, as well as the strategic ports of Coron and Modon on the Peloponnese. From a contemporary account of the siege of Chalcis,⁴ it would appear that there was a large and diverse population: besides the Venetians who made up the military, government and most of the merchant groups, there was the indigenous Greek population, and a large community of other Italians, Slavs, Albanians and Jews. This mixture would appear to be typical of the polyglot nature of the Venetian maritime empire.⁵

The exact circumstances of the find are also unknown, but research in the archives of the Ashmolean Museum have determined that the Chalcis Treasure was sold by an Athens dealer, P. Lambros, to A.W. Franks in the 1860s.⁶ The Treasure came to the British Museum in 1897 with the Franks Bequest. The Treasure, numbering 393 pieces in total,⁷ comprises a silver dish, a silver chain and different categories of small items of personal adornment such as jewellery, buttons, and belt fittings such as buckles and decorative mounts. All the items are made of gold, silver or silver gilt, and the applied decoration consists of, variously, gemstones, glass, pearls, niello and enamel. Due to the absence of coins that usually assist in providing a *terminus post quem* date, it has to be assumed that the deposit of the Chalcis Treasure was made in 1470, when Chalcis was invaded by the Ottoman Turks.

Of the four finger-rings in the collection at the British Museum, one in particular has aroused much comment (Pls 3–5).⁸ This is a large ring, 45.50mm in diameter, the hoop 22mm in diameter, and weighing 13.54g. The irregularly-shaped hoop is made up of a broad band of thinly-rolled sheet gold. At the top of each shoulder are two collet settings made of strips of gold framed by granulation; the settings are soldered onto the hoop, the solder concealed by the granulation.⁹ The setting below the two garnets is made in the same way but with a small strip of gold rather than the high collet in the settings above, and contains an irregularly-shaped pearl. The two topmost settings contain cabochon garnets. All the garnets are of the pyralspite group.¹⁰ A similar setting below the two garnets contains an irregularly-shaped pearl pierced with a gold pin, the flattened base of the pin soldered to the hoop and the top of the pin flattened over the pearl. One of the garnets is missing; in another setting, the backing paste is missing, causing the garnet to drop to the base of the cell. At the base of the hoop is a similar, single setting containing a cabochon garnet.

The elaborate bezel comprises a spherical bead which has been affixed at each side of the lower sphere to the hoop. Made in two sections, the bead is made from openwork filigree in the form of coiled wire, and granulation. The ends of the wire are soldered to the small discs seen inside the bead at top and bottom. The two hemispherical sections are soldered together at the centre to form the bead, the solder concealed by the granulation. There are losses to the filigree, and the bead is misshapen. At the top of the bead is an irregularly-shaped pearl pierced with a gold pin with a granulated head. The pearl revolves around the pin.

This highly unusual ring appears to have no parallels in western or Venetian rings, but is similar in certain characteristics to those from Islamic lands.¹¹ The present form of the hoop probably reflects the original design, but it may also be misshapen as a result of damage during deposit, burial or discovery, as one would expect a more evenly-formed or symmetrical hoop. The circumference of the hoop is in fact incomplete, as it is interrupted by the placement of the spherical beaded bezel. Although filigree beaded elements are



Plate1 Four finger-rings from the Chalcis treasure in the British Museum



Plate 2 Profiles of four finger-rings from the Chalcis Treasure in the British Museum



3



4



5

Plates 3–5 An Islamic finger-ring, 13th–15th centuries, gold, garnet, pearl



Plate 6 Gold finger-ring with a sapphire

not uncommonly used as bezels,¹² they are generally soldered or affixed to a shank which forms a complete hoop, rather than inserted between two ends of the shank that forms an incomplete hoop, as here.

The complexity of form of the spherical filigree bead is extremely similar to those bosses making up 'basket-shaped' earrings. Earrings of this type have been dated to the first quarter of the 11th century, and have been attributed to an Islamic production in Greater Syria.¹³ The emphasis on the shoulders of this ring, with its rich and highly-accomplished decoration, also has its parallels in Islamic rings of the 11th century. Many such rings with elaborate shoulder decoration are also fitted with a rear setting at the hoop, containing gems, pastes or pearls.¹⁴

This single ring demonstrates, both in its form and details of decoration, a strong Islamic influence. It was probably made by a highly-skilled goldsmith in the Islamic lands of Greater Syria or Egypt for a sophisticated market between the 13th and 15th centuries. It is likely to have found its way to Chalcis through mercantile trade, political gift or dynastic inheritance.

By contrast, the other three rings are more typical of finger-rings from the Late Byzantine Empire, and have been described by Dalton as 'Veneto-Greek'.¹⁵ The first example is a gold ring with a sapphire (**Pl. 6**),¹⁶ 30mm in diameter and weighing 13.02g. The octagonal hoop is ribbed at the shoulders, and rises to a bezel formed of a calyx of six petals, on which rests an oval plate with an irregular rim to the collet setting which contains a blue corundum (sapphire).

The second example is a gold ring with a pearl of a flattened spherical form (**Pl. 7**),¹⁷ 32.5mm in diameter, and 14.45g in weight. The hoop is of a rounded triangular section, terminating at each shoulder in a stylized monster head with open jaws that support a high, six-petalled calyx bezel, above which is a beaded circular setting inset with a pearl. At each side of the setting is a prong, or claw, which fits into a drilled hole in the pearl.

The third example is another gold ring with a pearl of a flattened spherical form (**Pl. 8**),¹⁸ 32.5mm in diameter, and weighing 8.29g. The flat hoop is shaped and engraved on the outer side to represent a twisted cable that supports a high, six-petalled calyx bezel with hexagonal flat plate, the flat plate ornamented with large and small beads. Above this is a circular setting inset with a pearl. At each side of the mount is a prong, or claw, which fits into a drilled hole in the pearl. At one hole the pearl is damaged and fractured; a third drilled hole is visible to the side of the pearl, although there is no indication that the setting was ever fitted with more than two prongs.



Plate 7 Gold finger-ring with pearl

The calyx forms on each of these three finger-rings have a number of parallels. A 6th-century example with a similar calyx bezel can be found in the Kanellopoulos Museum, Athens,¹⁹ while another example dating to the 7th century, in the collection of the Byzantine and Christian Museum, Athens, has been attributed to a Constantinopolitan workshop.²⁰ Other examples of the calyx bezel, again dating to the 6th and 7th centuries, are published as 'South Italian'.²¹ This author knows of no other rings with these calyx forms that dates from the 13th–15th centuries, and therefore would propose that these three rings are earlier in date than the other pieces in the Chalcis treasure and may be ascribed to the 6th – 7th centuries. If these are earlier pieces, they may have formed part of a separate hoard that was buried with the items of a later date, or could have been discovered elsewhere and subsumed into the Chalcis treasure.

The form of the single pearls in the two rings in the Chalcis Treasure is unusual for a supposed medieval date. The uniformity of the flattened spherical shape does not conform to other pearls with a definite medieval provenance, or to the single Islamic example assessed above, or even to those finger-rings with pearls from the Chalcis Treasure in the Ashmolean Museum. These two pearls may well be later replacements, either for lost pearls, or even for lost gems. If the British Museum rings did originally hold gems, they would appear to follow more closely the examples in the Kanellopoulos Museum, Athens, and the Byzantine and Christian Museum, Athens, and the 'prongs' now holding the pearls may once have been 'claw' settings for gemstones.



Plate 8 Gold finger-ring with pearl

The differences between the single Islamic ring and the other three rings epitomises the complexity and challenges in determining the nature of the Chalcis Treasure. It is clear that the Treasure comprises objects from different hoards and different dates, but how and when these came together remains a mystery.

Notes

- 1 It is based on the publications and generous assistance of Anna Ballian, John Cherry, Anastasia Drandaki, Jannic Durand, Christopher Entwistle, Jeffrey Spier. This author would be grateful to receive comments on these rings from any reader.
- 2 The Gennadius Library, Athens, 27 January 2009; Town Hall, Halkida, 28 January 2009.
- 3 See: McLeod, Kontoyannis, Georgopoulou and Geroussi-Bendermacher, forthcoming.
- 4 G.M. Angiolello, *Historia turchesa (1300–1514)*, I. Ursu (ed.), Bucharest, 1909.
- 5 For further reading on this subject and for full bibliographies, see: J.B. Bury, 'The Lombards and Venetians in Euboea', *Journal of Hellenic Studies* 7 (1886), 309–52; 8 (1887), 194–213; 9 (1888), 91–117; M. Georgopoulou, *Venice's Mediterranean Colonies*, Cambridge, 2001; S. Carboni (ed.), *Venice and the Islamic World, 828–1797* (exh. cat., Metropolitan Museum of Art, New York), New Haven and London, 2007.
- 6 Ashmolean Archives, Fortnum Papers, F/9/i/1–14, November 1867–December 1872. I am grateful to Timothy Wilson and Bridget Allen for making these documents available for study, and to Nicoletta Norman for her assistance in the transcription and translation.
- 7 Reg. nos. AF 1860–1863; 1887,0211.1; AF 2775–2845; OA 10820–10827.
- 8 Reg. no. AF 1860; O.M. Dalton, 'Medieval personal ornaments from Chalcis in the British and Ashmolean Museums', *Archaeologia* LXII (1911), pl. LVI, fig. 3, 395–6; O.M. Dalton, *Franks Bequest: Catalogue of the Finger Rings... in the British Museum*, London, 1912, no. 1821, 258, pl. XXV; A. Ward, J. Cherry, C. Gere, B. Cartlidge, *The Ring from Antiquity to the Twentieth Century*, Fribourg, 1981, no. 153, 73, pl. 153.
- 9 The description of the rings is based on the technical analysis carried out by Susan La Niece and Janet Ambers, British Museum, Department of Conservation and Scientific Research, unpublished report AR2008/85.
- 10 They were identified using Raman spectrometry with a Dilor Infinity spectrometer with a green (532 nm) laser with a power of 4mW at the sample. The sapphire ring detailed in this article was also identified using the same method.
- 11 M. Wenzel, *Ornament and Amulet: Rings of the Islamic Lands*, Oxford, 1993, nos 129–34. I am grateful to Anna Ballian for this reference.
- 12 *Ibid.*, nos 130, 131, 132.
- 13 Benaki Museum, Athens, Reg. no. 1820: see, D. Papanikola-Bakirtzi (ed.), *Everyday Life in Byzantium* (exh. cat., White Tower, Thessaloniki), Athens, 2002, no. 558 and bibliography.
- 14 Wenzel (n. 11), no. 253 (13th or 14th century) for a ring with heavily decorated shoulders with applied beads in beaded ring and with similar rear stud.
- 15 Dalton 1912 (n. 8), nos 1822–24.
- 16 Reg. no. AF 1862: Dalton 1911 (n. 8), fig. 4; Dalton 1912 (n. 8), no. 1823, 258, pl. XXV.
- 17 Reg. no. AF 1863: Dalton 1911 (n. 8), fig. 3; Dalton 1912 (n. 8), no. 1822, 258, pl. XXV.
- 18 Reg. no. AF 1863: Dalton 1911 (n. 8), fig. 2; Dalton 1912 (n. 8), no. 1824, 258, pl. XXV.
- 19 Papanikola-Bakirtzi (n. 13), no. 653.
- 20 *Ibid.*, no. 582.
- 21 S. Bury, *An Introduction to Rings*, London, 1984, nos 24a, 24d.